

A Profile of Health Among Massachusetts Adults, 2018

Results from the Behavioral Risk Factor Surveillance
System

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



December 2019

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Health Survey Program

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December 2019

TABLE OF CONTENTS

ACKNOWLEDGEMENTS	3
INTRODUCTION	4
HIGHLIGHTS	5
DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS	7
SECTION 1: OVERALL HEALTH MEASURES	8
Section 1.1: Overall Health Status	9
Section 1.2: Quality of Life	10
SECTION 2: HEALTH CARE ACCESS AND UTILIZATION	11
Section 2.1: Health Insurance Status	12
Section 2.2: Health Care Access.....	13
Section 2.3: Oral Health	15
SECTION 3: RISK FACTORS AND PREVENTIVE BEHAVIORS	16
Section 3.1: Tobacco Use	17
Section 3.2: Smoking Cessation	20
Section 3.3: Environmental Tobacco Smoke.....	21
Section 3.4: Alcohol Use	22
Section 3.5: Overweight and Obesity Status	23
Section 3.6: Physical Activity	24
SECTION 4: IMMUNIZATION.....	25
Section 4.1: Flu Vaccine and Pneumonia Vaccine	26
Section 4.2: Human Papilloma Virus (HPV) Vaccination	29
Section 4.3: Hepatitis B Virus (HBV) Vaccination	30
Section 4.4: Herpes Zoster (Shingles) Vaccination	31
SECTION 5: CHRONIC HEALTH CONDITIONS	32
Section 5.1: Diabetes	33
Section 5.2: Asthma.....	34
Section 5.3: Chronic Obstructive Pulmonary Disease (COPD).....	35
Section 5.4: Heart Disease and Stroke	36
Section 5.5: Depression	38
Section 5.6: Cancer Diagnosis	39
SECTION 6: CANCER SCREENING	40
Section 6.1: Colorectal Cancer Screening.....	41
Section 6.2: Breast Cancer Screening	42
Section 6.3: Cervical Cancer Screening.....	43
SECTION 7: OTHER TOPICS.....	44
Section 7.1: Sexual Orientation and Gender Identity.....	45
Section 7.2: HIV Testing	46
Section 7.3: Sexual Violence	47
Section 7.4: Unintentional Falls.....	48
Section 7.5: Drinking and Driving	49
Section 7.6: Seatbelt Use.....	50
Section 7.7: Family Planning.....	51
Section 7.8: Opioid and Marijuana Use	52
APPENDIX.....	54
Age-Adjusted Percentages For Selected Topics	55
Massachusetts and National Estimates.....	63
TERMS, DEFINITIONS AND STATISTICAL METHODOLOGY	64
LIMITATIONS	66

ACKNOWLEDGEMENTS

We wish to express our gratitude to the residents of Massachusetts who participated in this survey, and to Issues and Answers Network, Inc. and the dedicated interviewers who helped make this survey possible. We also wish to acknowledge the contributions of the staff of the many programs within the Massachusetts Department of Public Health who provided topical overviews and reviewed draft sections of this report relevant to their areas of expertise.

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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 public 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 opiate use, marijuana use, family planning, sexual violence, and other selected topics.

In 2018, 2,304 landline interviews and 4,365 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 2018 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 2018 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 2018 in a separate table.

All percentages in this report are weighted (see definition on page 64) to represent the total Massachusetts population in 2018.

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).
- The prevalence of reported frequent mental distress (15 or more days of poor mental health in the previous month) decreased with age (Table 1.2).

HEALTH CARE ACCESS AND UTILIZATION

- Overall, 3.8% of adults ages 18-64 reported not having any health insurance. Hispanic adults were more likely than White adults to not have health insurance. Those aged 25-34 were most likely to be uninsured (Table 2.1).
- Males were less likely than females to have a personal health care provider or to have had a routine check-up in the previous year (Table 2.2).
- Approximately 3 out of 4 adults reported that they had a dental visit in the previous year. Those with four or more years of college education and those with a household income of \$75,000 or more were more likely than others to have had a dental visit in the previous year (Table 2.3).

RISK FACTORS AND PREVENTIVE BEHAVIORS

- In 2018, 13.4% of adults reported current cigarette smoking. Adults with a disability* were twice as likely as those without a disability to be current cigarette smokers. Prevalence of cigarette smoking decreases with increasing education and increasing household income (Table 3.1.1).
- Overall, use of e-cigarettes is 5.6%; however, among those 18-24 years of age, 13.0% report using electronic cigarettes (Table 3.1.3).
- In 2018, 19.9% of adults reported binge drinking in the previous 30 days. Prevalence is highest among 18-34 year olds and decreases with age. Males are more likely than females to report binge drinking (Table 3.4).
- 61.6% of adults reported being overweight or obese (BMI \geq 25.0) and 25.7% reported being obese (BMI \geq 30.0). Obesity was higher among those with a disability and among those with less than four years of college education (Table 3.5).

*see definition of disability on p. 65

CHRONIC HEALTH CONDITIONS

- In 2018, 8.6% of adults reported that they had ever been diagnosed with diabetes and an additional 9.9% had been told that they have pre-diabetes. The crude prevalence of pre-diabetes has been increasing by an average of 7.5% per year since 2011 (Table 5.1).
- Asthma remains more prevalent in Massachusetts than in much of the rest of the nation. In 2018, 10.2% of adults reported that they currently have asthma (national range = 5.0 – 12.3%). Females were nearly twice as likely as males to report currently having asthma (Table 5.2).
- 18.1% 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. Prevalence of a depression diagnosis decreases with increasing educational attainment and with increasing household income (Table 5.5).

- In 2018, 11.3% of Massachusetts adults reported that they had ever been diagnosed with cancer. Among those 75 years of age and older, the prevalence of cancer survivors comprises 35% of all residents. White adults were more likely than Black or Hispanic adults to have ever been diagnosed with cancer (Table 5.6).

CANCER SCREENING

- Nearly one in four adults ages 50-75 reported they did not meet the US Preventive Services Task Force (USPSTF) recommendation for colorectal cancer screening (Table 6.1).
- 86.7% of females ages 50-74 reported having a mammogram in the previous two years (Table 6.2).
- 83.2% of females ages 21-65 without a hysterectomy reported having a pap smear in the previous three years; however, among those 21-24 years of age, this was only 56.6%. Asian females were less likely than White females to report having a pap smear in the previous three years (Table 6.3).

OTHER TOPICS

- 45.5% of adults ages 18-64 reported that they had ever been tested for HIV. Adults 18-64 years of age with a disability were more likely to report ever having been tested for HIV than those without a disability. Black adults and Hispanic adults were more likely than White adults or Asian adults to report ever having had an HIV test (Table 7.2).
- 24.6% of female adults and 5.7% of male adults reported that they had experienced sexual violence in their lifetime. Adults with a disability (males and females combined) were nearly twice as likely to report experiencing sexual violence as adults without a disability (Table 7.3).
- 25.9% of adults ages 65 and older reported that they had fallen at least once in the prior year and 33% of those reported that they sustained an injury from a fall (Table 7.4).
- 43% of adults reported that they had ever (in their lifetime) been prescribed an opiate and 1.0% reported non-medical use of an opiate in the previous year (Table 7.8.1).
- 13% of adults reported non-medical use of marijuana in the previous year. Males were more likely than females to report use. Younger adults (ages 18-34) were much more likely than older adults to report non-medical use of marijuana (Table 7.8.2).

DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

MASSACHUSETTS BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM, 2018

	UNWEIGHTED SAMPLE SIZE	WEIGHTED PERCENT
	N	%†
OVERALL	6,669	100.0
GENDER		
MALE	3,082	47.9
FEMALE	3,564	52.1
AGE GROUP		
18–24	505	13.4
25–34	801	16.9
35–44	736	15.2
45–54	992	15.7
55–64	1,323	17.6
65–74	1,233	12.2
75 AND OLDER	870	9.0
RACE-ETHNICITY*		
WHITE	5,274	75.4
BLACK	365	6.9
HISPANIC	522	10.7
ASIAN	248	7.0
EDUCATION		
< HIGH SCHOOL	328	10.3
HIGH SCHOOL	1,252	25.2
COLLEGE 1–3 YRS	1,496	26.2
COLLEGE 4+ YRS	3,552	38.2
HOUSEHOLD INCOME		
<\$25,000	901	18.5
\$25,000–34,999	462	8.4
\$35,000–49,999	617	11.5
\$50,000–74,999	783	14.0
\$75,000+	2,515	47.6

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

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

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, 2018				
	FAIR OR POOR HEALTH			
	N	%	95% CI	
OVERALL	6,643	14.2	13.1	- 15.3
GENDER				
MALE	3,063	14.6	12.9	- 16.2
FEMALE	3,557	13.7	12.2	- 15.2
AGE GROUP				
18–24	502	6.9	4.2	- 9.6
25–34	798	12.7	9.5	- 15.9
35–44	734	9.9	7.5	- 12.4
45–54	990	15.3	12.5	- 18.1
55–64	1,320	16.4	13.7	- 19.1
65–74	1,230	18.1	15.0	- 21.3
75 AND OLDER	861	24.2	20.1	- 28.4
RACE-ETHNICITY*				
WHITE	5,258	13.0	11.8	- 14.2
BLACK	362	13.4	9.0	- 17.7
HISPANIC	519	24.5	19.9	- 29.1
ASIAN	248	8.1	3.7	- 12.5
DISABILITY [¶]				
DISABILITY	1,626	39.3	36.0	- 42.5
NO DISABILITY	4,825	5.8	4.9	- 6.7
EDUCATION				
< HIGH SCHOOL	324	34.5	28.3	- 40.8
HIGH SCHOOL	1,241	20.0	17.4	- 22.6
COLLEGE 1–3 YRS	1,489	12.5	10.5	- 14.5
COLLEGE 4+ YRS	3,548	6.1	5.2	- 7.0
HOUSEHOLD INCOME				
<\$25,000	898	32.4	28.3	- 36.5
\$25,000–34,999	460	18.5	14.1	- 23.0
\$35,000–49,999	617	12.0	8.8	- 15.1
\$50,000–74,999	780	12.4	9.1	- 15.6
\$75,000+	2,510	5.4	4.3	- 6.5
* White, Black, and Asian race categories refer to non-Hispanic [¶] See p 65 for definition of disability				

SECTION 1.2: QUALITY OF LIFE

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

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

TABLE 1.2 – QUALITY OF LIFE AMONG MASSACHUSETTS ADULTS, 2018										
	15+ DAYS OF POOR PHYSICAL HEALTH					15+ DAYS OF POOR MENTAL HEALTH				
	N	%	95% CI			N	%	95% CI		
OVERALL	6,514	9.8	8.9	-	10.8	6,550	12.0	10.9	-	13.1
GENDER										
MALE	3,003	8.8	7.5	-	10.1	3,021	10.1	8.7	-	11.6
FEMALE	3,489	10.8	9.4	-	12.2	3,506	13.6	11.9	-	15.3
AGE GROUP										
18–24	495	4.5	2.0	-	6.9	497	18.9	14.6	-	23.2
25–34	789	6.8	4.1	-	9.6	793	15.9	12.3	-	19.5
35–44	722	6.4	4.5	-	8.3	728	11.2	8.6	-	13.9
45–54	974	10.7	8.3	-	13.0	978	10.6	8.3	-	12.8
55–64	1,292	14.2	11.6	-	16.7	1,300	10.5	8.3	-	12.6
65–74	1,199	13.4	10.6	-	16.2	1,208	8.5	6.1	-	10.9
75 AND OLDER	835	15.6	12.3	-	19.0	843	6.5	3.5	-	9.5
RACE-ETHNICITY*										
WHITE	5,173	10.4	9.2	-	11.5	5,190	12.8	11.4	-	14.1
BLACK	360	8.8	5.2	-	12.4	362	10.5	6.6	-	14.4
HISPANIC	496	10.1	7.1	-	13.2	509	11.4	8.3	-	14.6
ASIAN	†					†				
DISABILITY¶										
DISABILITY	1,550	28.5	25.4	-	31.6	1,589	27.4	24.2	-	30.6
NO DISABILITY	4,777	4.0	3.3	-	4.7	4,774	6.7	5.8	-	7.7
EDUCATION										
< HIGH SCHOOL	309	18.9	13.5	-	24.3	314	21.4	15.5	-	27.4
HIGH SCHOOL	1,202	13.1	10.8	-	15.4	1,220	14.9	12.4	-	17.5
COLLEGE 1–3 YRS	1,460	10.0	8.2	-	11.7	1,463	13.7	11.5	-	16.0
COLLEGE 4+ YRS	3,505	5.3	4.5	-	6.1	3,515	6.5	5.6	-	7.4
HOUSEHOLD INCOME										
<\$25,000	868	21.9	18.2	-	25.7	879	24.3	20.2	-	28.4
\$25,000–34,999	451	12.9	8.9	-	16.9	452	15.3	10.6	-	20.1
\$35,000–49,999	603	7.1	4.8	-	9.4	609	13.6	10.0	-	17.2
\$50,000–74,999	777	9.6	6.8	-	12.4	777	10.4	7.6	-	13.3
\$75,000+	2,490	4.4	3.4	-	5.4	2,495	6.5	5.2	-	7.8
* White, Black, and Asian race categories refer to non-Hispanic										
† Insufficient data										
¶ See p 65 for definition of disability										

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 INSURANCE STATUS AMONG MASSACHUSETTS ADULTS, AGES 18-64, 2018				
	NO HEALTH INSURANCE			
	N	%	95% CI	
OVERALL	3,901	3.8	3.0	- 4.7
GENDER				
MALE	1,841	4.6	3.3	- 5.9
FEMALE	2,050	3.0	1.9	- 4.2
AGE GROUP				
18–24	†			
25–34	626	6.8	4.0	- 9.7
35–44	676	4.3	2.3	- 6.3
45–54	944	2.1	1.0	- 3.1
55–64	1,269	2.5	1.4	- 3.6
RACE-ETHNICITY*				
WHITE	2,938	2.5	1.8	- 3.3
BLACK	†			
HISPANIC	404	9.7	5.7	- 13.6
ASIAN	†			
DISABILITY [¶]				
DISABILITY	767	7.0	4.3	- 9.7
NO DISABILITY	3,019	3.0	2.1	- 3.8
EDUCATION				
< HIGH SCHOOL	197	12.0	6.5	- 17.6
HIGH SCHOOL	743	4.6	3.0	- 6.3
COLLEGE 1–3 YRS	869	2.6	1.4	- 3.8
COLLEGE 4+ YRS	2,080	1.8	0.9	- 2.7
HOUSEHOLD INCOME				
<\$25,000	515	6.9	3.7	- 10.0
\$25,000–34,999	†			
\$35,000–49,999	302	8.5	4.6	- 12.3
\$50,000–74,999	445	3.2	1.5	- 5.0
\$75,000+	†			
* White, Black, and Asian race categories refer to non-Hispanic † Insufficient data ¶ See p 65 for definition of disability				

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, 2018

	HAVE PERSONAL HEALTH CARE PROVIDER					COULD NOT SEE DOCTOR DUE TO COST				
	N	%	95% CI			N	%	95% CI		
OVERALL	6,631	86.7	85.6	-	87.8	6,640	8.8	7.8	-	9.7
GENDER										
MALE	3,060	82.2	80.4	-	84.0	3,070	8.1	6.8	-	9.4
FEMALE	3,548	91.0	89.6	-	92.3	3,548	9.2	7.9	-	10.6
AGE GROUP										
18–24	495	72.6	68.1	-	77.0	501	10.7	7.5	-	13.9
25–34	798	73.9	70.2	-	77.6	799	13.8	11.0	-	16.7
35–44	726	86.7	83.5	-	89.8	734	11.8	8.8	-	14.9
45–54	987	91.3	89.1	-	93.6	991	7.9	5.8	-	10.1
55–64	1,319	93.1	91.4	-	94.8	1,318	7.6	5.7	-	9.5
65–74	1,233	96.5	95.3	-	97.7	1,229	3.5	2.2	-	4.8
75 AND OLDER	867	96.5	94.5	-	98.6	862	2.6	1.2	-	4.1
RACE-ETHNICITY*										
WHITE	5,250	89.1	88.0	-	90.3	5,260	7.6	6.6	-	8.7
BLACK	362	83.1	78.1	-	88.0	361	13.3	9.0	-	17.6
HISPANIC	519	79.6	75.5	-	83.6	519	14.9	11.1	-	18.6
ASIAN	243	77.1	71.0	-	83.1	†				
DISABILITY¶										
DISABILITY	1,625	87.7	85.3	-	90.0	1,627	15.6	13.1	-	18.2
NO DISABILITY	4,811	86.5	85.2	-	87.8	4,820	6.3	5.4	-	7.2
EDUCATION										
< HIGH SCHOOL	326	82.6	77.6	-	87.6	327	14.4	9.8	-	18.9
HIGH SCHOOL	1,244	83.4	80.8	-	85.9	1,246	9.7	7.6	-	11.7
COLLEGE 1–3 YRS	1,485	87.0	84.9	-	89.1	1,487	9.6	7.7	-	11.5
COLLEGE 4+ YRS	3,537	89.9	88.5	-	91.2	3,540	6.1	5.2	-	7.1
HOUSEHOLD INCOME										
<\$25,000	893	79.8	76.4	-	83.3	896	16.9	13.6	-	20.3
\$25,000–34,999	462	82.6	78.0	-	87.3	462	17.5	12.6	-	22.3
\$35,000–49,999	616	86.9	83.4	-	90.5	616	12.0	8.8	-	15.2
\$50,000–74,999	780	87.2	84.2	-	90.3	780	10.1	6.8	-	13.3
\$75,000+	2,509	90.6	88.9	-	92.2	2,509	3.5	2.7	-	4.4

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

† Insufficient data

¶ See p 65 for definition of disability

TABLE 2.2 (CONTINUED) - HEALTH CARE ACCESS AMONG MASSACHUSETTS ADULTS, 2018

	HAD A ROUTINE CHECKUP IN THE PAST YEAR		
	N	%	95% CI
OVERALL	6,600	79.7	78.4 - 81.1
GENDER			
MALE	3,041	77.0	75.0 - 79.1
FEMALE	3,538	82.3	80.7 - 84.0
AGE GROUP			
18–24	492	75.8	71.3 - 80.2
25–34	792	66.1	62.0 - 70.1
35–44	727	73.2	69.1 - 77.2
45–54	984	82.6	79.8 - 85.5
55–64	1,314	83.7	81.1 - 86.3
65–74	1,226	90.5	88.2 - 92.7
75 AND OLDER	862	93.8	91.5 - 96.2
RACE-ETHNICITY*			
WHITE	5,227	79.9	78.4 - 81.4
BLACK	361	83.5	78.6 - 88.4
HISPANIC	514	76.5	72.1 - 80.9
ASIAN	244	80.1	74.1 - 86.1
DISABILITY [¶]			
DISABILITY	1,620	84.2	81.6 - 86.9
NO DISABILITY	4,785	77.9	76.3 - 79.4
EDUCATION			
< HIGH SCHOOL	320	79.8	74.0 - 85.6
HIGH SCHOOL	1,239	78.8	75.9 - 81.7
COLLEGE 1–3 YRS	1,479	81.0	78.6 - 83.4
COLLEGE 4+ YRS	3,526	79.4	77.6 - 81.1
HOUSEHOLD INCOME			
<\$25,000	889	78.3	74.8 - 81.8
\$25,000–34,999	456	79.7	74.6 - 84.8
\$35,000–49,999	612	79.3	75.0 - 83.6
\$50,000–74,999	773	80.0	76.2 - 83.7
\$75,000+	2,503	79.5	77.4 - 81.6
<p>* White, Black, and Asian race categories refer to non-Hispanic</p> <p>¶ See p 65 for definition of disability</p>			

SECTION 2.3: ORAL HEALTH

All respondents were asked how long it had been since they had last visited a dentist or a dental clinic. Presented here is the percentage reporting that they had been to a dentist or a dental clinic within the past year. The wording of the question did not differentiate between a routine cleaning and other types of dental work. All respondents were also asked how many of their teeth were missing due to decay or gum disease only. The number of teeth missing due to injury or orthodontic purposes is not included. Presented here is the percentage of adults with six or more teeth missing.

TABLE 2.3 – DENTAL HEALTH CARE AMONG MASSACHUSETTS ADULTS, 2018										
	DENTAL VISIT IN PAST YEAR					SIX OR MORE TEETH MISSING				
	N	%	95% CI			N	%	95% CI		
OVERALL	6,581	74.4	72.9	-	75.8	6,472	12.6	11.5	-	13.6
GENDER										
MALE	3,036	72.5	70.4	-	74.7	2,988	12.6	11.1	-	14.2
FEMALE	3,524	76.1	74.1	-	78.0	3,463	12.5	11.1	-	14.0
AGE GROUP										
18–24	497	75.1	70.7	-	79.6	†				
25–34	789	64.6	60.3	-	68.9	†				
35–44	728	72.4	68.0	-	76.8	723	5.5	3.3	-	7.7
45–54	984	80.7	77.8	-	83.6	978	9.1	6.8	-	11.5
55–64	1,311	76.4	73.2	-	79.5	1,290	18.1	15.2	-	20.9
65–74	1,219	77.8	74.5	-	81.1	1,183	25.7	22.2	-	29.1
75 AND OLDER	850	72.8	68.5	-	77.1	815	39.8	34.9	-	44.7
RACE-ETHNICITY*										
WHITE	5,221	76.4	74.8	-	77.9	5,136	12.9	11.7	-	14.1
BLACK	355	69.4	63.6	-	75.2	350	16.7	11.7	-	21.7
HISPANIC	515	67.2	62.1	-	72.3	511	13.0	9.3	-	16.7
ASIAN	237	72.3	64.6	-	80.0	†				
DISABILITY¶										
DISABILITY	1,601	63.3	59.9	-	66.7	1,565	27.4	24.4	-	30.4
NO DISABILITY	4,789	78.1	76.5	-	79.7	4,729	7.9	6.9	-	8.9
EDUCATION										
< HIGH SCHOOL	319	52.9	45.9	-	59.8	316	30.8	24.8	-	36.8
HIGH SCHOOL	1,228	67.6	64.4	-	70.9	1,203	20.1	17.5	-	22.8
COLLEGE 1–3 YRS	1,478	76.4	73.8	-	79.0	1,448	9.3	7.8	-	10.8
COLLEGE 4+ YRS	3,519	83.1	81.5	-	84.7	3,473	5.0	4.3	-	5.8
HOUSEHOLD INCOME										
<\$25,000	873	59.7	55.2	-	64.1	861	23.3	19.8	-	26.9
\$25,000–34,999	454	62.2	56.0	-	68.4	451	19.4	14.8	-	24.0
\$35,000–49,999	613	74.4	70.1	-	78.8	601	14.0	10.4	-	17.6
\$50,000–74,999	778	75.1	71.0	-	79.2	767	14.8	11.3	-	18.2
\$75,000+	2,504	83.1	81.0	-	85.1	2,483	4.6	3.6	-	5.5
* White, Black, and Asian race categories refer to non-Hispanic † Insufficient data ¶ See p 65 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 every day. 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.

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 3.1.1 – TOBACCO USE AMONG MASSACHUSETTS ADULTS, 2018

	CURRENT SMOKER					FORMER SMOKER				
	N	%	95% CI			N	%	95% CI		
OVERALL	6,471	13.4	12.2	-	14.6	6,471	25.1	23.7	-	26.4
GENDER										
MALE	2,974	15.2	13.3	-	17.0	2,974	26.3	24.4	-	28.3
FEMALE	3,477	11.7	10.2	-	13.2	3,477	24.0	22.1	-	25.8
AGE GROUP										
18–24	490	10.1	7.1	-	13.1	490	4.7	2.7	-	6.7
25–34	774	19.0	15.2	-	22.7	774	16.1	12.4	-	19.8
35–44	715	15.6	12.2	-	19.0	715	20.3	16.8	-	23.9
45–54	967	14.7	11.8	-	17.6	967	22.8	19.6	-	26.0
55–64	1,284	13.9	11.3	-	16.5	1,284	32.4	29.2	-	35.6
65–74	1,203	10.3	7.8	-	12.8	1,203	45.7	42.0	-	49.3
75 AND OLDER	846	7.3	4.0	-	10.7	846	44.4	39.6	-	49.1
RACE-ETHNICITY*										
WHITE	5,148	14.1	12.7	-	15.5	5,148	29.6	28.0	-	31.2
BLACK	349	11.3	7.3	-	15.4	349	10.7	6.6	-	14.9
HISPANIC	502	13.7	10.0	-	17.4	502	13.6	10.3	-	17.0
ASIAN	230	5.9	2.6	-	9.1	230	6.2	2.8	-	9.5
DISABILITY¶										
DISABILITY	1,615	23.6	20.6	-	26.7	1,615	30.7	27.7	-	33.8
NO DISABILITY	4,783	10.0	8.8	-	11.1	4,783	23.3	21.8	-	24.7
EDUCATION										
< HIGH SCHOOL	313	30.7	24.3	-	37.2	313	20.0	14.2	-	25.8
HIGH SCHOOL	1,207	19.2	16.4	-	22.0	1,207	29.9	26.8	-	32.9
COLLEGE 1–3 YRS	1,457	13.3	11.3	-	15.3	1,457	29.0	26.2	-	31.7
COLLEGE 4+ YRS	3,462	5.1	4.2	-	5.9	3,462	20.7	19.1	-	22.2
HOUSEHOLD INCOME										
<\$25,000	874	24.4	20.7	-	28.2	874	20.8	17.0	-	24.6
\$25,000–34,999	454	20.2	14.3	-	26.1	454	26.1	21.0	-	31.3
\$35,000–49,999	605	17.1	12.9	-	21.2	605	28.6	24.1	-	33.1
\$50,000–74,999	773	13.5	9.8	-	17.1	773	32.6	28.4	-	36.7
\$75,000+	2,484	7.4	5.9	-	8.8	2,484	24.7	22.6	-	26.8

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

¶ See p 65 for definition of disability

TABLE 3.1.2 - SMOKELESS TOBACCO USE AMONG MASSACHUSETTS ADULTS, 2018

	USE SMOKELESS TOBACCO		
	N	%	95% CI
OVERALL	6,507	2.6	1.9 - 3.2
GENDER			
MALE	2,991	4.0	3.0 - 5.1
FEMALE	3,496	1.2	0.6 - 1.8
AGE GROUP			
18–24	†		
25–34	778	5.3	2.9 - 7.6
35–44	718	3.3	1.7 - 4.9
45–54	†		
55–64	1,289	1.6	0.7 - 2.5
65–74	†		
75 AND OLDER			
RACE-ETHNICITY*			
WHITE	5,177	2.6	1.9 - 3.3
BLACK	†		
HISPANIC	503	4.5	2.0 - 7.0
ASIAN	†		
DISABILITY¶			
DISABILITY	1,625	4.0	2.5 - 5.6
NO DISABILITY	4,810	2.1	1.5 - 2.8
EDUCATION			
< HIGH SCHOOL	315	8.0	4.2 - 11.8
HIGH SCHOOL	1,217	3.2	1.7 - 4.6
COLLEGE 1–3 YRS	1,461	2.2	1.3 - 3.2
COLLEGE 4+ YRS	3,484	0.9	0.6 - 1.3
HOUSEHOLD INCOME			
<\$25,000	881	3.8	1.9 - 5.7
\$25,000–34,999	†		
\$35,000–49,999	†		
\$50,000–74,999	†		
\$75,000+	2,488	1.7	1.0 - 2.5

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

† Insufficient data

¶ See p 65 for definition of disability

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

TABLE 3.1.3 – ELECTRONIC CIGARETTE USE AMONG MASSACHUSETTS ADULTS, 2018			
	USE E-CIGARETTES		
	N	%	95% CI
OVERALL	6,008	5.6	4.7 - 6.5
GENDER			
MALE	2,742	7.0	5.7 - 8.3
FEMALE	3,248	4.3	3.1 - 5.5
AGE GROUP			
18–24	379	13.0	9.0 - 16.9
25–34	610	11.2	7.6 - 14.8
35–44	666	5.8	3.5 - 8.0
45–54	926	3.9	2.2 - 5.6
55–64	1,234	3.6	2.3 - 4.9
65–74	†		
75 AND OLDER	†		
RACE-ETHNICITY*			
WHITE	4,793	6.0	4.9 - 7.1
BLACK	†		
HISPANIC	462	4.8	2.4 - 7.2
ASIAN	†		
DISABILITY [¶]			
DISABILITY	1,531	8.1	5.7 - 10.5
NO DISABILITY	4,414	4.6	3.8 - 5.5
EDUCATION			
< HIGH SCHOOL	301	8.1	3.6 - 12.6
HIGH SCHOOL	1,166	6.7	4.9 - 8.6
COLLEGE 1–3 YRS	1,355	7.2	5.3 - 9.2
COLLEGE 4+ YRS	3,162	2.9	2.2 - 3.6
HOUSEHOLD INCOME			
<\$25,000	802	6.8	3.6 - 10.0
\$25,000–34,999	437	4.7	2.0 - 7.5
\$35,000–49,999	566	8.7	5.7 - 11.8
\$50,000–74,999	717	7.2	4.4 - 10.0
\$75,000+	2,271	4.9	3.5 - 6.3
<p>* White, Black, and Asian race categories refer to non-Hispanic</p> <p>† Insufficient data</p> <p>¶ See p 65 for definition of disability</p>			

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. They were also asked if they had any intention of trying to quit smoking within the next 30 days. 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 and the percentage of adult current smokers who reported that they had plans to quit smoking within the next 30 days.

TABLE 3.2 – SMOKING CESSATION AMONG MASSACHUSETTS ADULTS, 2018			
	QUIT ATTEMPT		
	N	%	95% CI
OVERALL	749	59.9	55.2 - 64.6
GENDER			
MALE	389	59.9	53.4 - 66.3
FEMALE	355	60.4	53.6 - 67.2
AGE GROUP			
18–24	51	62.3	47.0 - 77.6
25–34	120	62.8	52.2 - 73.4
35–44	113	65.4	54.6 - 76.3
45–54	136	59.0	47.9 - 70.1
55–64	160	52.5	42.2 - 62.8
65–74	113	65.0	53.3 - 76.7
75 AND OLDER	†		
RACE-ETHNICITY*			
WHITE	586	59.9	54.5 - 65.2
BLACK	†		
HISPANIC	66	55.5	40.8 - 70.3
ASIAN	†		
DISABILITY¶			
DISABILITY	316	61.9	54.5 - 69.3
NO DISABILITY	424	57.7	51.6 - 63.8
EDUCATION			
< HIGH SCHOOL	93	56.2	44.1 - 68.3
HIGH SCHOOL	229	58.3	50.2 - 66.5
COLLEGE 1–3 YRS	224	62.5	54.9 - 70.1
COLLEGE 4+ YRS	198	65.9	58.2 - 73.6
HOUSEHOLD INCOME			
<\$25,000	219	63.3	55.1 - 71.6
\$25,000–34,999	70	63.2	46.4 - 80.0
\$35,000–49,999	85	65.6	53.3 - 77.8
\$50,000–74,999	89	56.3	41.9 - 70.8
\$75,000+	151	60.5	50.6 - 70.4
* White, Black, and Asian race categories refer to non-Hispanic † Insufficient data ¶ See p 65 for definition of disability			

SECTION 3.3: ENVIRONMENTAL TOBACCO SMOKE

Respondents were asked about rules regarding smoking in their households; whether smoking was permitted anywhere, smoking was allowed in some places or at some times, or smoking was not allowed anywhere. Presented here is the percentage of adults reporting that no smoking was permitted anywhere in their household.

TABLE 3.3 – ENVIRONMENTAL TOBACCO AMONG MASSACHUSETTS ADULTS, 2018

	NO SMOKING ALLOWED IN HOUSEHOLD		
	N	%	95% CI
OVERALL	2,786	84.0	82.1 - 85.9
GENDER			
MALE	1,274	81.8	79.0 - 84.6
FEMALE	1,508	86.0	83.5 - 88.5
AGE GROUP			
18–24	179	74.8	67.8 - 81.9
25–34	272	80.4	74.5 - 86.3
35–44	318	89.6	85.3 - 93.9
45–54	417	85.1	80.9 - 89.3
55–64	566	82.9	79.0 - 86.8
65–74	571	87.9	84.3 - 91.5
75 AND OLDER	385	86.2	80.8 - 91.7
RACE-ETHNICITY*			
WHITE	2,247	83.0	80.9 - 85.2
BLACK	154	87.7	81.3 - 94.1
HISPANIC	207	89.2	83.4 - 95.0
ASIAN	90	81.8	72.1 - 91.6
DISABILITY [¶]			
DISABILITY	717	75.9	71.3 - 80.4
NO DISABILITY	2,045	86.7	84.7 - 88.6
EDUCATION			
< HIGH SCHOOL	146	76.0	67.5 - 84.5
HIGH SCHOOL	533	79.8	75.3 - 84.3
COLLEGE 1–3 YRS	635	80.4	76.6 - 84.3
COLLEGE 4+ YRS	1,464	91.2	89.6 - 92.9
HOUSEHOLD INCOME			
<\$25,000	378	73.7	67.7 - 79.6
\$25,000–34,999	195	70.7	61.2 - 80.2
\$35,000–49,999	280	83.3	77.6 - 89.0
\$50,000–74,999	364	82.8	77.3 - 88.2
\$75,000+	1,030	90.5	88.3 - 92.8

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

[¶] See p 65 for definition of disability

SECTION 3.4: 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 3.4 – ALCOHOL USE AMONG MASSACHUSETTS ADULTS, 2018

	BINGE DRINKING					HEAVY DRINKING				
	N	%	95% CI			N	%	95% CI		
OVERALL	6,291	19.9	18.5	-	21.2	6,237	8.0	7.1	-	8.9
GENDER										
MALE	2,893	24.3	22.2	-	26.4	2,869	8.2	6.8	-	9.6
FEMALE	3,381	15.8	14.0	-	17.6	3,364	7.8	6.7	-	9.0
AGE GROUP										
18–24	471	29.2	24.4	-	34.0	469	7.8	4.9	-	10.7
25–34	747	32.1	27.8	-	36.3	740	7.9	5.4	-	10.5
35–44	685	23.1	19.0	-	27.1	682	7.4	5.1	-	9.7
45–54	946	20.8	17.5	-	24.0	939	8.4	6.3	-	10.4
55–64	1,257	14.9	12.3	-	17.5	1,246	10.3	8.0	-	12.5
65–74	1,181	8.2	6.1	-	10.4	1,172	7.0	5.3	-	8.8
75 AND OLDER	829	3.9	1.7	-	6.2	822	5.5	3.6	-	7.5
RACE-ETHNICITY*										
WHITE	5,029	20.9	19.3	-	22.5	4,991	9.2	8.1	-	10.3
BLACK	329	16.6	11.3	-	22.0	327	5.0	2.1	-	7.8
HISPANIC	471	20.6	16.0	-	25.2	466	4.5	2.4	-	6.6
ASIAN	230	14.1	8.2	-	20.1	†				
DISABILITY¶										
DISABILITY	1,557	20.0	16.8	-	23.2	1,532	8.2	6.1	-	10.3
NO DISABILITY	4,666	19.7	18.2	-	21.1	4,641	7.9	6.9	-	8.9
EDUCATION										
< HIGH SCHOOL	295	21.4	15.2	-	27.7	289	8.2	4.1	-	12.3
HIGH SCHOOL	1,155	20.0	17.0	-	23.0	1,141	6.6	4.8	-	8.4
COLLEGE 1–3 YRS	1,417	20.5	17.8	-	23.2	1,400	8.7	6.9	-	10.5
COLLEGE 4+ YRS	3,398	19.1	17.4	-	20.7	3,380	8.4	7.2	-	9.5
HOUSEHOLD INCOME										
<\$25,000	842	20.2	16.0	-	24.4	829	6.0	3.9	-	8.1
\$25,000–34,999	436	14.1	9.6	-	18.7	431	6.9	3.7	-	10.2
\$35,000–49,999	588	17.5	13.5	-	21.4	585	7.0	4.6	-	9.5
\$50,000–74,999	761	24.5	20.2	-	28.8	756	7.7	5.4	-	10.0
\$75,000+	2,444	23.5	21.3	-	25.7	2,429	10.6	9.0	-	12.3

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

† Insufficient data

¶ See p 65 for definition of disability

SECTION 3.5: 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 3.5 – OVERWEIGHT AND OBESE AMONG MASSACHUSETTS ADULTS, 2018

	OVERWEIGHT (BMI ≥ 25.0)					OBESE (BMI ≥ 30.0)				
	N	%	95% CI			N	%	95% CI		
OVERALL	6,092	61.6	60.0	-	63.3	6,092	25.7	24.2	-	27.1
GENDER										
MALE	2,924	69.4	67.2	-	71.6	2,924	27.0	25.0	-	29.1
FEMALE	3,154	54.0	51.6	-	56.4	3,154	24.3	22.3	-	26.4
AGE GROUP										
18–24	459	37.8	32.5	-	43.0	459	13.0	9.5	-	16.6
25–34	720	57.1	52.7	-	61.6	720	25.8	21.4	-	30.2
35–44	660	62.6	57.8	-	67.4	660	27.2	23.1	-	31.2
45–54	935	68.1	64.6	-	71.7	935	29.9	26.5	-	33.4
55–64	1,221	69.9	66.7	-	73.1	1,221	29.8	26.5	-	33.1
65–74	1,151	70.2	66.8	-	73.6	1,151	29.0	25.6	-	32.4
75 AND OLDER	819	63.4	58.8	-	68.1	819	22.5	18.1	-	26.9
RACE-ETHNICITY*										
WHITE	4,895	61.6	59.8	-	63.3	4,895	26.4	24.7	-	28.0
BLACK	323	69.8	63.7	-	76.0	323	26.7	20.8	-	32.6
HISPANIC	453	72.2	67.2	-	77.1	453	30.2	25.1	-	35.3
ASIAN	211	35.8	27.8	-	43.8	211	7.1	3.3	-	10.8
DISABILITY [¶]										
DISABILITY	1,529	66.6	63.3	-	70.0	1,529	35.2	31.9	-	38.6
NO DISABILITY	4,451	60.2	58.3	-	62.1	4,451	22.5	20.9	-	24.1
EDUCATION										
< HIGH SCHOOL	282	67.3	60.1	-	74.5	282	29.0	21.9	-	36.0
HIGH SCHOOL	1,133	66.5	63.0	-	70.0	1,133	29.4	26.2	-	32.6
COLLEGE 1–3 YRS	1,382	62.3	59.0	-	65.6	1,382	28.1	25.2	-	30.9
COLLEGE 4+ YRS	3,270	56.5	54.4	-	58.6	3,270	20.9	19.2	-	22.6
HOUSEHOLD INCOME										
<\$25,000	821	61.6	57.1	-	66.1	821	29.6	25.3	-	34.0
\$25,000–34,999	421	67.3	60.8	-	73.8	421	29.5	23.5	-	35.6
\$35,000–49,999	586	62.3	57.3	-	67.3	586	24.9	20.3	-	29.5
\$50,000–74,999	751	65.8	61.4	-	70.2	751	26.9	22.9	-	31.0
\$75,000+	2,409	61.1	58.4	-	63.7	2,409	24.4	22.3	-	26.6

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

[¶] See p 65 for definition of disability

SECTION 3.6: PHYSICAL ACTIVITY

In 2018, all respondents were asked if during the past month, other than their regular job, they participated in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise. Presented here is the percentage of adults who participated in any leisure time physical activity in the last 30 days.

TABLE 3.6 - ANY LEISURE TIME PHYSICAL ACTIVITY AMONG MASSACHUSETTS ADULTS, 2018			
	PHYSICAL ACTIVITY IN THE PAST MONTH		
	N	%	95% CI
OVERALL	6,658	77.6	76.2 - 78.9
GENDER			
MALE	3,078	79.8	78.0 - 81.7
FEMALE	3,557	75.6	73.6 - 77.5
AGE GROUP			
18–24	503	84.8	80.9 - 88.7
25–34	800	80.0	76.1 - 84.0
35–44	736	81.8	78.3 - 85.4
45–54	990	77.9	74.8 - 81.1
55–64	1,322	76.5	73.5 - 79.6
65–74	1,232	75.1	71.8 - 78.4
75 AND OLDER	866	60.1	55.2 - 65.0
RACE-ETHNICITY*			
WHITE	5,267	79.5	78.0 - 80.9
BLACK	364	71.2	65.4 - 77.0
HISPANIC	521	64.2	58.9 - 69.5
ASIAN	247	83.9	78.0 - 89.7
DISABILITY [¶]			
DISABILITY	1,631	60.3	57.0 - 63.6
NO DISABILITY	4,831	83.1	81.6 - 84.5
EDUCATION			
< HIGH SCHOOL	327	54.5	47.6 - 61.4
HIGH SCHOOL	1,250	68.6	65.4 - 71.7
COLLEGE 1–3 YRS	1,492	79.6	77.2 - 82.0
COLLEGE 4+ YRS	3,548	88.2	87.0 - 89.4
HOUSEHOLD INCOME			
<\$25,000	899	61.1	56.7 - 65.5
\$25,000–34,999	461	67.3	61.5 - 73.1
\$35,000–49,999	617	78.2	74.0 - 82.5
\$50,000–74,999	783	79.6	75.9 - 83.4
\$75,000+	2,514	88.2	86.5 - 89.9
* White, Black, and Asian race categories refer to non-Hispanic [¶] See p 65 for definition of disability			

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, 2018										
	FLU VACCINE IN PAST YEAR, AGES 18-49					FLU VACCINE IN PAST YEAR, AGES 50-64				
	N	%	95% CI			N	%	95% CI		
OVERALL	2,350	29.2	26.9	-	31.5	1,826	39.4	36.6	-	42.1
GENDER										
MALE	1,156	25.6	22.5	-	28.6	825	37.4	33.4	-	41.4
FEMALE	1,189	32.9	29.5	-	36.2	997	41.2	37.4	-	44.9
AGE GROUP										
18–24	474	28.6	23.6	-	33.7					
25–34	762	25.6	21.9	-	29.3					
35–44	703	31.8	27.5	-	36.1					
45–49	411	33.7	28.2	-	39.1					
50–64						1,826	39.4	36.6	-	42.1
RACE-ETHNICITY*										
WHITE	1,625	28.5	25.9	-	31.0	1,544	38.2	35.3	-	41.1
BLACK	173	24.1	17.0	-	31.3	88	42.5	29.5	-	55.6
HISPANIC	310	28.5	22.0	-	35.0	109	45.0	33.7	-	56.3
ASIAN	162	40.8	30.9	-	50.7	†				
DISABILITY¶										
DISABILITY	396	25.0	19.7	-	30.2	424	34.8	29.1	-	40.5
NO DISABILITY	1,923	30.3	27.8	-	32.9	1,389	40.9	37.8	-	44.0
EDUCATION										
< HIGH SCHOOL	107	25.1	16.1	-	34.1	91	39.2	26.9	-	51.4
HIGH SCHOOL	427	19.5	15.3	-	23.8	324	31.6	25.7	-	37.6
COLLEGE 1–3 YRS	540	26.8	22.1	-	31.6	375	37.8	32.1	-	43.5
COLLEGE 4+ YRS	1,268	38.3	35.1	-	41.4	1,030	44.6	41.1	-	48.2
HOUSEHOLD INCOME										
<\$25,000	343	24.6	19.0	-	30.3	217	32.7	24.7	-	40.8
\$25,000–34,999	149	21.6	13.9	-	29.4	92	23.5	13.8	-	33.2
\$35,000–49,999	213	24.6	17.7	-	31.4	115	34.0	22.1	-	46.0
\$50,000–74,999	256	23.7	17.8	-	29.6	227	37.2	29.6	-	44.8
\$75,000+	1,004	36.2	32.4	-	39.9	892	43.3	39.4	-	47.1
* White, Black, and Asian race categories refer to non-Hispanic										
† Insufficient data										
¶ See p 65 for definition of disability										

TABLE 4.1.2 – FLU VACCINE AMONG MASSACHUSETTS ADULTS, AGES 65 YEARS AND OLDER, 2018

	FLU VACCINE IN PAST YEAR, AGES 65+		
	N	%	95% CI
OVERALL	2,049	54.5	51.5 - 57.4
GENDER			
MALE	894	54.3	49.9 - 58.6
FEMALE	1,152	54.8	50.8 - 58.7
AGE GROUP			
65–74	1,204	52.8	49.1 - 56.4
75 AND OLDER	845	56.8	52.1 - 61.6
RACE-ETHNICITY*			
WHITE	1,825	53.3	50.2 - 56.4
BLACK	67	44.9	28.3 - 61.5
HISPANIC	64	82.2	70.7 - 93.7
ASIAN	†		
DISABILITY¶			
DISABILITY	762	57.2	52.3 - 62.1
NO DISABILITY	1,263	52.5	48.9 - 56.1
EDUCATION			
< HIGH SCHOOL	106	66.2	55.0 - 77.4
HIGH SCHOOL	415	45.3	39.2 - 51.3
COLLEGE 1–3 YRS	487	51.5	46.1 - 57.0
COLLEGE 4+ YRS	1,034	60.1	56.5 - 63.6
HOUSEHOLD INCOME			
<\$25,000	290	60.2	52.4 - 68.0
\$25,000–34,999	197	51.8	41.6 - 61.9
\$35,000–49,999	257	49.0	40.9 - 57.2
\$50,000–74,999	273	42.8	35.1 - 50.4
\$75,000+	532	57.7	52.6 - 62.9

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

† Insufficient data

¶ See p 65 for definition of disability

TABLE 4.1.3 – PNEUMONIA VACCINE AMONG MASSACHUSETTS ADULTS, AGES 65 YEARS AND OLDER, 2018					
	EVER HAD PNEUMONIA VACCINE				
	N	%	95% CI		
OVERALL	1,965	73.4	70.7	-	76.1
GENDER					
MALE	836	69.6	65.4	-	73.9
FEMALE	1,126	76.3	72.9	-	79.8
AGE GROUP					
65–74	1,159	72.5	69.2	-	75.8
75 AND OLDER	806	74.6	70.1	-	79.1
RACE-ETHNICITY*					
WHITE	1,759	76.4	73.8	-	79.1
BLACK	59	65.2	49.0	-	81.3
HISPANIC	58	34.0	19.2	-	48.8
ASIAN	†				
DISABILITY¶					
DISABILITY	724	75.2	70.7	-	79.7
NO DISABILITY	1,219	71.9	68.5	-	75.2
EDUCATION					
< HIGH SCHOOL	95	56.4	43.5	-	69.3
HIGH SCHOOL	399	77.5	72.2	-	82.8
COLLEGE 1–3 YRS	476	75.3	70.5	-	80.1
COLLEGE 4+ YRS	988	73.5	70.2	-	76.9
HOUSEHOLD INCOME					
<\$25,000	282	71.8	64.0	-	79.7
\$25,000–34,999	192	76.7	68.4	-	85.0
\$35,000–49,999	248	76.7	69.7	-	83.7
\$50,000–74,999	263	75.7	69.6	-	81.9
\$75,000+	505	74.0	69.2	-	78.7
* White, Black, and Asian race categories refer to non-Hispanic † Insufficient data ¶ See p 65 for definition of disability					

SECTION 4.2: HUMAN PAPILLOMA VIRUS (HPV) VACCINATION

All respondents between the ages of 18-49 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, 2018

	EVER HAD HPV VACCINE					COMPLETED SERIES **				
	N	%	95% CI			N	%	95% CI		
OVERALL	200	63.1	55.2	-	71.0	114	79.1	69.6	-	88.5
GENDER										
MALE										
FEMALE	200	63.1	55.2	-	71.0	114	79.1	69.6	-	88.5
AGE GROUP										
18-24	69	66.7	54.0	-	79.3	†				
25-34	131	60.2	50.4	-	70.0	75	83.9	74.2	-	93.6
RACE-ETHNICITY*										
WHITE	143	62.6	53.1	-	72.0	87	80.3	68.8	-	91.8
BLACK	†					†				
HISPANIC	†					†				
ASIAN	†					†				
DISABILITY¶										
DISABILITY	†					†				
NO DISABILITY	162	64.7	56.0	-	73.5	94	79.9	69.2	-	90.5
EDUCATION										
< HIGH SCHOOL	†					†				
HIGH SCHOOL	†					†				
COLLEGE 1-3 YRS	50	65.7	51.4	-	80.0	†				
COLLEGE 4+ YRS	103	69.1	59.5	-	78.7	63	86.9	78.6	-	95.2
HOUSEHOLD INCOME										
<\$25,000	†					†				
\$25,000-34,999	†					†				
\$35,000-49,999	†					†				
\$50,000-74,999	†					†				
\$75,000+	71	69.6	57.4	-	81.8	†				

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

† Insufficient data

¶ See p 65 for definition of disability

** Analysis conducted among those who reported ever having had vaccine

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, 2018			
	RECEIVED 3 SHOTS HBV VACCINE		
	N	%	95% CI
OVERALL	2,322	40.9	38.3 - 43.6
GENDER			
MALE	1,060	35.1	31.5 - 38.6
FEMALE	1,259	46.2	42.4 - 50.0
AGE GROUP			
18–24	137	60.4	51.1 - 69.6
25–34	217	56.8	49.3 - 64.3
35–44	257	51.8	44.0 - 59.7
45–54	344	40.0	34.1 - 45.8
55–64	478	32.9	27.9 - 37.9
65–74	493	22.5	18.2 - 26.8
75 AND OLDER	333	13.3	8.9 - 17.7
RACE-ETHNICITY*			
WHITE	1,873	39.4	36.6 - 42.2
BLACK	134	43.5	33.0 - 54.0
HISPANIC	174	42.7	33.7 - 51.7
ASIAN	69	55.8	40.3 - 71.3
DISABILITY [¶]			
DISABILITY	611	33.3	28.4 - 38.2
NO DISABILITY	1,689	43.3	40.2 - 46.4
EDUCATION			
< HIGH SCHOOL	127	33.3	21.1 - 45.4
HIGH SCHOOL	457	28.9	23.6 - 34.3
COLLEGE 1–3 YRS	531	41.6	36.3 - 46.9
COLLEGE 4+ YRS	1,199	50.4	46.9 - 53.8
HOUSEHOLD INCOME			
<\$25,000	329	36.3	29.7 - 43.0
\$25,000–34,999	163	34.1	24.6 - 43.5
\$35,000–49,999	240	37.4	29.3 - 45.6
\$50,000–74,999	292	34.1	26.9 - 41.4
\$75,000+	846	52.2	47.9 - 56.6
* White, Black, and Asian race categories refer to non-Hispanic			
¶ See p 65 for definition of disability			

SECTION 4.4: HERPES ZOSTER (SHINGLES) VACCINATION

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

TABLE 4.4 – SHINGLES VACCINE AMONG MASSACHUSETTS ADULTS, AGE 60+, 2018			
	EVER HAD SHINGLES VACCINE		
	N	%	95% CI
OVERALL	1,229	44.7	41.0 - 48.4
GENDER			
MALE	537	45.5	40.0 - 51.0
FEMALE	692	44.1	39.1 - 49.1
AGE GROUP			
60-69	588	39.4	34.1 - 44.8
70-79	404	55.7	49.5 - 61.9
80 AND OLDER	237	41.5	33.0 - 50.0
RACE-ETHNICITY*			
WHITE	1,103	46.3	42.5 - 50.0
BLACK	†		
HISPANIC	†		
ASIAN	†		
DISABILITY¶			
DISABILITY	421	37.1	30.8 - 43.3
NO DISABILITY	794	48.9	44.4 - 53.4
EDUCATION			
< HIGH SCHOOL	†		
HIGH SCHOOL	237	40.8	33.1 - 48.5
COLLEGE 1–3 YRS	298	47.3	39.9 - 54.6
COLLEGE 4+ YRS	628	52.0	47.4 - 56.6
HOUSEHOLD INCOME			
<\$25,000	169	28.8	20.8 - 36.9
\$25,000–34,999	106	39.9	27.3 - 52.4
\$35,000–49,999	161	48.8	39.0 - 58.6
\$50,000–74,999	180	53.1	42.7 - 63.5
\$75,000+	352	52.3	46.0 - 58.5
* White, Black, and Asian race categories refer to non-Hispanic † Insufficient data ¶ See p 65 for definition of disability			

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. 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 doctor had ever told them that they had diabetes and the percentage of adults who reported that a doctor had ever told them that they had pre-diabetes.

TABLE 5.1 – DIABETES AMONG MASSACHUSETTS ADULTS, 2018

	PRE-DIABETES					DIABETES				
	N	%	95% CI			N	%	95% CI		
OVERALL	2,719	9.9	8.4	-	11.3	6,651	8.6	7.8	-	9.5
GENDER										
MALE	1,228	12.1	9.8	-	14.4	3,068	10.1	8.8	-	11.4
FEMALE	1,484	8.0	6.1	-	9.8	3,560	7.2	6.1	-	8.2
AGE GROUP										
18–24	†					†				
25–34	†					†				
35–44	331	7.6	4.4	-	10.7	733	6.0	3.8	-	8.2
45–54	412	10.2	6.6	-	13.9	990	7.7	5.7	-	9.7
55–64	551	15.9	11.7	-	20.1	1,322	12.1	9.9	-	14.4
65–74	493	16.1	10.4	-	21.7	1,230	19.3	16.4	-	22.3
75 AND OLDER	350	13.4	9.0	-	17.7	867	19.1	15.3	-	22.9
RACE-ETHNICITY*										
WHITE	2,183	9.4	7.9	-	11.0	5,262	8.2	7.3	-	9.0
BLACK	†					363	10.4	6.7	-	14.0
HISPANIC	201	10.5	6.1	-	15.0	518	13.2	9.5	-	16.8
ASIAN	†					†				
DISABILITY¶										
DISABILITY	591	14.6	10.7	-	18.5	1,631	17.5	15.2	-	19.8
NO DISABILITY	2,045	8.6	7.1	-	10.1	4,824	5.6	4.8	-	6.4
EDUCATION										
< HIGH SCHOOL	128	14.8	7.8	-	21.8	325	13.0	9.2	-	16.9
HIGH SCHOOL	507	11.2	8.0	-	14.3	1,248	11.6	9.6	-	13.6
COLLEGE 1–3 YRS	615	10.2	7.1	-	13.3	1,495	8.7	7.1	-	10.2
COLLEGE 4+ YRS	1,457	7.7	6.1	-	9.4	3,543	5.6	4.7	-	6.5
HOUSEHOLD INCOME										
<\$25,000	338	11.6	7.6	-	15.7	899	14.7	11.7	-	17.7
\$25,000–34,999	†					462	10.1	6.9	-	13.4
\$35,000–49,999	267	6.4	3.2	-	9.6	616	7.1	4.9	-	9.3
\$50,000–74,999	344	17.0	10.9	-	23.0	782	9.7	7.2	-	12.2
\$75,000+	1,026	7.4	5.5	-	9.3	2,513	5.4	4.3	-	6.4

* White, Black, and Asian race categories refer to non-Hispanic
† Insufficient data
¶ See p 65 for definition of disability

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, 2018

	EVER HAD ASTHMA					CURRENTLY HAVE ASTHMA				
	N	%	95% CI			N	%	95% CI		
OVERALL	6,638	15.2	14.1	-	16.4	6,609	10.2	9.2	-	11.1
GENDER										
MALE	3,061	13.0	11.5	-	14.6	3,049	7.1	5.9	-	8.2
FEMALE	3,554	17.1	15.4	-	18.9	3,537	12.9	11.4	-	14.4
AGE GROUP										
18–24	501	21.6	17.2	-	26.0	497	13.7	9.9	-	17.5
25–34	800	17.8	14.1	-	21.5	794	9.8	7.1	-	12.6
35–44	734	14.8	11.8	-	17.8	731	10.2	7.6	-	12.7
45–54	991	14.7	12.1	-	17.3	987	10.7	8.4	-	13.0
55–64	1,315	12.5	10.5	-	14.5	1,310	8.2	6.6	-	9.9
65–74	1,225	13.1	10.6	-	15.7	1,221	10.1	7.7	-	12.4
75 AND OLDER	864	12.1	9.2	-	14.9	861	9.2	6.6	-	11.9
RACE-ETHNICITY*										
WHITE	5,249	15.9	14.5	-	17.2	5,226	10.4	9.3	-	11.5
BLACK	364	12.3	8.4	-	16.1	363	9.5	5.9	-	13.1
HISPANIC	519	17.4	13.5	-	21.3	519	12.6	9.1	-	16.0
ASIAN	†					†				
DISABILITY¶										
DISABILITY	1,622	22.8	19.8	-	25.8	1,612	16.6	14.0	-	19.1
NO DISABILITY	4,823	12.7	11.5	-	13.9	4,804	8.0	7.0	-	9.0
EDUCATION										
< HIGH SCHOOL	323	19.7	13.8	-	25.6	322	14.3	9.5	-	19.2
HIGH SCHOOL	1,245	15.3	12.8	-	17.8	1,241	9.9	7.9	-	11.9
COLLEGE 1–3 YRS	1,493	16.3	14.0	-	18.5	1,483	11.0	9.0	-	13.0
COLLEGE 4+ YRS	3,537	13.4	12.0	-	14.7	3,523	8.8	7.7	-	9.9
HOUSEHOLD INCOME										
<\$25,000	892	20.4	16.6	-	24.3	887	14.2	11.1	-	17.3
\$25,000–34,999	460	15.6	11.2	-	19.9	457	11.1	7.3	-	14.8
\$35,000–49,999	615	15.6	11.9	-	19.4	614	9.4	6.4	-	12.4
\$50,000–74,999	781	11.6	8.9	-	14.4	776	8.1	5.7	-	10.5
\$75,000+	2,512	13.9	12.1	-	15.7	2,507	8.9	7.4	-	10.4

* White, Black, and Asian race categories refer to non-Hispanic
† Insufficient data
¶ See p 65 for definition of disability

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, 2018			
	EVER DIAGNOSED WITH COPD		
	N	%	95% CI
OVERALL	6,627	5.1	4.4 - 5.7
GENDER			
MALE	3,056	4.3	3.5 - 5.1
FEMALE	3,548	5.7	4.7 - 6.7
AGE GROUP			
18–24	†		
25–34	†		
35–44	735	2.8	1.5 - 4.2
45–54	988	4.1	2.5 - 5.6
55–64	1,313	6.1	4.4 - 7.7
65–74	1,228	10.4	8.2 - 12.7
75 AND OLDER	860	12.6	9.2 - 16.0
RACE-ETHNICITY*			
WHITE	5,250	5.3	4.6 - 6.0
BLACK	†		
HISPANIC	520	4.6	2.2 - 6.9
ASIAN	†		
DISABILITY [¶]			
DISABILITY	1,617	12.6	10.4 - 14.8
NO DISABILITY	4,818	2.6	2.1 - 3.2
EDUCATION			
< HIGH SCHOOL	325	11.3	7.2 - 15.4
HIGH SCHOOL	1,236	5.9	4.5 - 7.4
COLLEGE 1–3 YRS	1,488	5.3	4.2 - 6.4
COLLEGE 4+ YRS	3,538	2.6	2.0 - 3.1
HOUSEHOLD INCOME			
<\$25,000	890	10.6	8.1 - 13.0
\$25,000–34,999	460	10.2	6.0 - 14.3
\$35,000–49,999	615	4.6	2.9 - 6.3
\$50,000–74,999	781	4.7	3.0 - 6.5
\$75,000+	2,509	1.8	1.3 - 2.4
<p>* White, Black, and Asian race categories refer to non-Hispanic</p> <p>† Insufficient data</p> <p>¶ See p 65 for definition of disability</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, 2018										
	EVER DIAGNOSED WITH MYOCARDIAL INFARCTION					EVER DIAGNOSED WITH ANGINA OR CORONARY HEART DISEASE				
	N	%	95% CI			N	%	95% CI		
OVERALL	5,130	5.6	4.8	-	6.4	5,119	4.7	4.0	-	5.4
GENDER										
MALE	2,299	7.3	5.9	-	8.6	2,291	6.1	4.9	-	7.3
FEMALE	2,820	4.0	3.0	-	5.0	2,817	3.4	2.6	-	4.2
AGE GROUP										
35–44	†					†				
45–54	988	2.9	1.5	-	4.3	988	2.4	1.1	-	3.7
55–64	1,321	4.6	3.3	-	5.9	1,316	4.4	3.0	-	5.8
65–74	1,222	8.5	6.3	-	10.7	1,225	6.7	5.0	-	8.4
75 AND OLDER	865	13.9	10.4	-	17.4	857	12.8	10.0	-	15.6
RACE-ETHNICITY*										
WHITE	4,280	5.7	4.8	-	6.6	4,274	5.0	4.2	-	5.7
BLACK	†					†				
HISPANIC	†					†				
ASIAN	†					†				
DISABILITY¶										
DISABILITY	1,397	11.7	9.4	-	14.0	1,388	9.2	7.3	-	11.0
NO DISABILITY	3,604	3.3	2.6	-	4.0	3,602	2.8	2.2	-	3.4
EDUCATION										
< HIGH SCHOOL	259	11.0	6.2	-	15.7	257	6.0	2.7	-	9.2
HIGH SCHOOL	955	7.6	5.6	-	9.5	955	6.4	4.7	-	8.1
COLLEGE 1–3 YRS	1,120	5.6	4.2	-	7.1	1,114	4.9	3.6	-	6.3
COLLEGE 4+ YRS	2,776	2.8	2.2	-	3.5	2,773	3.1	2.4	-	3.8
HOUSEHOLD INCOME										
<\$25,000	663	11.5	8.1	-	14.9	661	8.8	6.0	-	11.6
\$25,000–34,999	351	11.7	6.3	-	17.0	354	7.4	4.4	-	10.5
\$35,000–49,999	459	7.0	4.3	-	9.7	459	6.5	3.9	-	9.2
\$50,000–74,999	611	4.0	1.9	-	6.1	609	3.7	2.1	-	5.3
\$75,000+	2,044	2.8	2.0	-	3.6	2,042	3.0	2.2	-	3.9
* White, Black, and Asian race categories refer to non-Hispanic † Insufficient data ¶ See p 65 for definition of disability										

**TABLE 5.4.2 – STROKE AMONG MASSACHUSETTS ADULTS,
AGES 35 YEARS AND OLDER, 2018**

	EVER DIAGNOSED WITH STROKE		
	N	%	95% CI
OVERALL	5,139	3.4	2.7 - 4.0
GENDER			
MALE	2,300	3.4	2.4 - 4.3
FEMALE	2,827	3.3	2.5 - 4.1
AGE GROUP			
35–44	†		
45–54	990	2.7	1.4 - 4.1
55–64	1,319	2.6	1.6 - 3.6
65–74	1,229	3.9	2.5 - 5.3
75 AND OLDER	866	9.0	6.4 - 11.7
RACE-ETHNICITY*			
WHITE	4,280	3.2	2.6 - 3.9
BLACK	†		
HISPANIC	†		
ASIAN	†		
DISABILITY [¶]			
DISABILITY	1,402	8.0	6.2 - 9.7
NO DISABILITY	3,607	1.5	1.0 - 2.0
EDUCATION			
< HIGH SCHOOL	264	5.4	2.3 - 8.6
HIGH SCHOOL	959	4.6	3.1 - 6.2
COLLEGE 1–3 YRS	1,117	3.1	2.0 - 4.1
COLLEGE 4+ YRS	2,778	2.0	1.4 - 2.6
HOUSEHOLD INCOME			
<\$25,000	666	7.3	4.7 - 10.0
\$25,000–34,999	354	4.9	2.1 - 7.6
\$35,000–49,999	†		
\$50,000–74,999	610	3.0	1.4 - 4.6
\$75,000+	2,043	1.2	0.6 - 1.7

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

† Insufficient data

¶ See p 65 for definition of disability

SECTION 5.5: 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 5.5 – DEPRESSION AMONG MASSACHUSETTS ADULTS, 2018			
	EVER DIAGNOSED WITH DEPRESSION		
	N	%	95% CI
OVERALL	6,621	18.1	16.9 - 19.4
GENDER			
MALE	3,050	13.4	11.9 - 14.9
FEMALE	3,548	22.4	20.4 - 24.3
AGE GROUP			
18–24	497	21.0	16.5 - 25.4
25–34	798	23.0	19.2 - 26.9
35–44	730	20.4	16.8 - 24.1
45–54	986	18.9	16.0 - 21.9
55–64	1,314	17.1	14.5 - 19.6
65–74	1,229	14.7	12.2 - 17.3
75 AND OLDER	864	9.7	7.1 - 12.3
RACE-ETHNICITY*			
WHITE	5,245	19.1	17.6 - 20.5
BLACK	362	16.8	11.7 - 22.0
HISPANIC	516	20.0	15.8 - 24.2
ASIAN	244	8.3	3.7 - 12.9
DISABILITY [¶]			
DISABILITY	1,618	37.9	34.6 - 41.2
NO DISABILITY	4,812	11.7	10.5 - 12.9
EDUCATION			
< HIGH SCHOOL	323	28.7	22.5 - 34.9
HIGH SCHOOL	1,238	19.0	16.2 - 21.8
COLLEGE 1–3 YRS	1,489	20.1	17.5 - 22.6
COLLEGE 4+ YRS	3,532	13.4	12.1 - 14.7
HOUSEHOLD INCOME			
<\$25,000	895	33.3	29.0 - 37.7
\$25,000–34,999	460	19.8	15.1 - 24.5
\$35,000–49,999	616	20.1	15.8 - 24.3
\$50,000–74,999	774	17.5	14.1 - 21.0
\$75,000+	2,508	12.6	10.9 - 14.2
<p>* White, Black, and Asian race categories refer to non-Hispanic</p> <p>¶ See p 65 for definition of disability</p>			

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, 2018			
	EVER DIAGNOSED WITH CANCER		
	N	%	95% CI
OVERALL	6,634	11.3	10.4 - 12.1
GENDER			
MALE	3,062	10.1	8.9 - 11.2
FEMALE	3,550	12.3	11.1 - 13.6
AGE GROUP			
18–24	†		
25–34	†		
35–44	733	4.4	2.8 - 6.1
45–54	990	9.6	7.4 - 11.9
55–64	1,316	15.5	13.2 - 17.7
65–74	1,223	24.7	21.5 - 27.8
75 AND OLDER	864	35.0	30.6 - 39.4
RACE-ETHNICITY*			
WHITE	5,247	13.7	12.6 - 14.7
BLACK	361	3.2	1.4 - 5.0
HISPANIC	522	5.8	3.3 - 8.3
ASIAN	†		
DISABILITY [¶]			
DISABILITY	1,623	16.9	14.6 - 19.1
NO DISABILITY	4,816	9.6	8.7 - 10.5
EDUCATION			
< HIGH SCHOOL	326	10.1	6.4 - 13.8
HIGH SCHOOL	1,243	12.1	10.1 - 14.0
COLLEGE 1–3 YRS	1,485	9.6	8.1 - 11.1
COLLEGE 4+ YRS	3,540	12.2	11.1 - 13.4
HOUSEHOLD INCOME			
<\$25,000	892	10.2	7.8 - 12.5
\$25,000–34,999	460	13.1	9.0 - 17.1
\$35,000–49,999	616	11.1	8.2 - 13.9
\$50,000–74,999	782	11.1	8.7 - 13.5
\$75,000+	2,508	11.0	9.6 - 12.3
* White, Black, and Asian race categories refer to non-Hispanic † Insufficient data ¶ See p 65 for definition of disability			

SECTION 6: CANCER SCREENING

SECTION 6.1: COLORECTAL CANCER SCREENING

Respondents, ages 50 and older, were asked if they ever had had a blood stool test using a home test kit to determine if their stool contained blood and were also asked if they had ever had a sigmoidoscopy or colonoscopy, tests that examine the bowel for signs of cancer or other health problems. Presented here is the percentage of adults ages 50-75 who had either a blood stool test in the previous year, a blood stool test in the previous three years and a sigmoidoscopy/colonoscopy in the previous five years, or a colonoscopy in the previous ten years.

**TABLE 6.1 – COLORECTAL CANCER SCREENING AMONG ADULTS
AGES 50-75, 2018**

	MET SCREENING RECOMMENDATION FOR COLORECTAL CANCER		
	N	%	95% CI
OVERALL	2,947	77.1	75.1 - 79.1
GENDER			
MALE	1,352	77.2	74.4 - 80.0
FEMALE	1,590	77.1	74.4 - 79.9
AGE GROUP			
50-59	1,117	69.9	66.6 - 73.2
60-69	1,213	82.2	79.3 - 85.1
70-75	617	84.2	80.2 - 88.3
RACE-ETHNICITY*			
WHITE	2,554	78.3	76.2 - 80.4
BLACK	123	79.9	71.7 - 88.0
HISPANIC	131	68.3	58.7 - 77.9
ASIAN	50	70.0	54.7 - 85.4
DISABILITY [¶]			
DISABILITY	730	73.7	69.4 - 78.0
NO DISABILITY	2,197	78.4	76.2 - 80.6
EDUCATION			
< HIGH SCHOOL	120	66.5	56.2 - 76.8
HIGH SCHOOL	517	71.9	67.2 - 76.6
COLLEGE 1–3 YRS	640	79.9	76.4 - 83.4
COLLEGE 4+ YRS	1,662	80.7	78.3 - 83.1
HOUSEHOLD INCOME			
<\$25,000	348	67.5	60.9 - 74.2
\$25,000–34,999	195	69.9	61.4 - 78.5
\$35,000–49,999	261	82.1	76.4 - 87.9
\$50,000–74,999	398	80.0	75.2 - 84.8
\$75,000+	1,249	78.5	75.6 - 81.4
* White, Black, and Asian race categories refer to non-Hispanic			
¶ See p 65 for definition of disability			

SECTION 6.2: BREAST CANCER SCREENING

All female respondents were asked about breast cancer screening. Those women who reported that they had ever had a mammogram were asked how long it had been since their last mammogram. The percentage of women age 50-75 in Massachusetts who reported that they had a mammogram in the past two years is presented in Table 6.2.

TABLE 6.2 – BREAST CANCER SCREENING AMONG MASSACHUSETTS WOMEN AGES 50 - 74, 2018			
	MAMMOGRAM IN THE PAST TWO YEARS		
	N	%	95% CI
OVERALL	1,592	86.7	84.5 - 88.8
AGE GROUP			
50-59	619	86.2	82.9 - 89.5
60-69	672	85.9	82.4 - 89.4
70-74	301	90.1	86.3 - 94.0
RACE-ETHNICITY*			
WHITE	1,383	86.2	83.9 - 88.6
BLACK	71	81.0	70.4 - 91.6
HISPANIC	76	96.4	92.6 - 100
ASIAN	†		
DISABILITY¶			
DISABILITY	427	82.8	77.8 - 87.8
NO DISABILITY	1,160	88.0	85.7 - 90.3
EDUCATION			
< HIGH SCHOOL	69	89.9	80.8 - 99.0
HIGH SCHOOL	260	86.4	81.3 - 91.5
COLLEGE 1–3 YRS	356	84.3	79.8 - 88.7
COLLEGE 4+ YRS	904	87.7	85.1 - 90.2
HOUSEHOLD INCOME			
<\$25,000	206	79.0	71.3 - 86.7
\$25,000–34,999	107	77.6	67.1 - 88.0
\$35,000–49,999	139	84.7	77.3 - 92.0
\$50,000–74,999	223	88.7	83.4 - 93.9
\$75,000+	605	89.3	86.4 - 92.2
* White, Black, and Asian race categories refer to non-Hispanic † Insufficient data ¶ See p 65 for definition of disability			

SECTION 6.3: CERVICAL CANCER SCREENING

All female respondents were asked if they ever had had a Pap smear, a screening test for cancer of the cervix. Those who reported that they had had a Pap smear were then asked how long it had been since their last Pap smear. The percentage of women ages 21 – 65 without a hysterectomy who reported having had a Pap smear in the past 3 years is presented below.

TABLE 6.3 – CERVICAL CANCER SCREENING AMONG MASSACHUSETTS WOMEN, 2018			
	PAP SMEAR TEST WITHIN PAST THREE YEARS		
	N	%	95% CI
OVERALL	1,813	83.2	81.0 - 85.5
AGE GROUP			
21–24	148	56.6	47.2 - 66.0
25–34	321	87.5	83.4 - 91.7
35–44	334	86.2	80.6 - 91.8
45–54	440	89.1	85.8 - 92.4
55–64	518	84.3	80.4 - 88.1
RACE-ETHNICITY*			
WHITE	1,424	85.8	83.4 - 88.1
BLACK	107	85.5	78.4 - 92.5
HISPANIC	168	77.3	69.8 - 84.8
ASIAN	62	63.2	47.6 - 78.8
DISABILITY [¶]			
DISABILITY	345	81.0	75.3 - 86.6
NO DISABILITY	1,456	84.0	81.6 - 86.4
EDUCATION			
< HIGH SCHOOL	70	84.9	76.6 - 93.1
HIGH SCHOOL	233	74.6	67.5 - 81.6
COLLEGE 1–3 YRS	357	80.9	75.7 - 86.1
COLLEGE 4+ YRS	1,150	87.6	85.4 - 89.8
HOUSEHOLD INCOME			
<\$25,000	231	80.8	74.7 - 86.9
\$25,000–34,999	103	80.9	72.0 - 89.8
\$35,000–49,999	147	82.5	75.1 - 89.9
\$50,000–74,999	216	79.5	71.8 - 87.1
\$75,000+	834	89.6	87.1 - 92.1
* White, Black, and Asian race categories refer to non-Hispanic [¶] See p 65 for definition of disability			

SECTION 7: OTHER TOPICS

SECTION 7.1: 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 2018, 0.75% of Massachusetts adults self-identified as transgender. A table of this data is not presented due to the low prevalence.

TABLE 7.1 - SEXUAL ORIENTATION AMONG MASSACHUSETTS ADULTS, 2018			
	SELF-IDENTIFIED AS HOMOSEXUAL, BISEXUAL OR OTHER		
	N	%	95% CI
OVERALL	5,571	7.5	6.4 - 8.6
GENDER			
MALE	2,548	5.9	4.8 - 7.1
FEMALE	3,012	8.8	7.1 - 10.5
AGE GROUP			
18–24	353	22.6	17.1 - 28.1
25–34	565	12.3	8.6 - 16.1
35–44	606	5.9	3.4 - 8.5
45–54	867	4.7	3.1 - 6.3
55–64	1,151	3.8	2.7 - 5.0
65–74	1,114	2.6	1.4 - 3.7
75 AND OLDER	†		
RACE-ETHNICITY*			
WHITE	4,516	6.8	5.7 - 7.9
BLACK	†		
HISPANIC	396	11.8	7.9 - 15.8
ASIAN	†		
DISABILITY [¶]			
DISABILITY	1,401	11.6	8.8 - 14.4
NO DISABILITY	4,117	6.1	5.0 - 7.1
EDUCATION			
< HIGH SCHOOL	256	9.7	4.1 - 15.3
HIGH SCHOOL	1,069	7.7	5.4 - 9.9
COLLEGE 1–3 YRS	1,250	8.1	6.1 - 10.1
COLLEGE 4+ YRS	2,980	6.4	5.2 - 7.5
HOUSEHOLD INCOME			
<\$25,000	717	11.9	7.8 - 16.0
\$25,000–34,999	401	6.3	3.0 - 9.6
\$35,000–49,999	532	8.3	5.0 - 11.6
\$50,000–74,999	692	4.2	2.2 - 6.2
\$75,000+	2,167	6.0	4.5 - 7.4
* White, Black, and Asian race categories refer to non-Hispanic † Insufficient data ¶ See p 65 for definition of disability			

SECTION 7.2: 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 7.2 – HIV TESTING AMONG MASSACHUSETTS ADULTS, AGES 18-64, 2018

	EVER TESTED FOR HIV					TESTED FOR HIV IN PAST YEAR				
	N	%	95% CI			N	%	95% CI		
OVERALL	3,924	45.5	43.5	-	47.4	3,259	11.2	9.9	-	12.6
GENDER										
MALE	1,867	41.9	39.1	-	44.6	1,575	10.4	8.6	-	12.2
FEMALE	2,048	49.0	46.2	-	51.9	1,676	12.1	10.0	-	14.1
AGE GROUP										
18-24	456	28.6	23.8	-	33.3	397	12.0	8.4	-	15.5
25-34	725	57.1	52.5	-	61.6	567	20.4	16.5	-	24.3
35-44	662	62.0	57.2	-	66.7	516	14.7	10.8	-	18.6
45-54	894	49.3	45.3	-	53.2	744	8.3	5.9	-	10.7
55-64	1,187	29.8	26.7	-	33.0	1,035	2.5	1.3	-	3.7
RACE-ETHNICITY*										
WHITE	2,970	44.3	42.1	-	46.5	2,477	9.2	7.7	-	10.6
BLACK	249	59.5	52.0	-	67.0	196	24.3	17.0	-	31.6
HISPANIC	396	57.1	51.1	-	63.1	315	21.3	15.7	-	26.9
ASIAN	180	26.9	18.2	-	35.6	†				
DISABILITY¶										
DISABILITY	778	53.9	49.3	-	58.6	620	17.2	13.5	-	20.9
NO DISABILITY	3,104	43.0	40.8	-	45.2	2,607	9.6	8.2	-	11.0
EDUCATION										
< HIGH SCHOOL	184	49.7	40.7	-	58.6	151	15.6	9.2	-	22.1
HIGH SCHOOL	725	41.7	37.5	-	46.0	615	12.9	9.9	-	15.9
COLLEGE 1-3 YRS	848	46.3	42.3	-	50.3	693	12.5	9.6	-	15.4
COLLEGE 4+ YRS	2,155	46.1	43.6	-	48.6	1,791	8.2	6.6	-	9.7
HOUSEHOLD INCOME										
<\$25,000	531	57.1	51.6	-	62.6	401	22.5	17.2	-	27.7
\$25,000-34,999	228	52.3	43.8	-	60.7	178	20.7	13.4	-	28.1
\$35,000-49,999	312	49.5	42.5	-	56.4	264	12.8	8.0	-	17.7
\$50,000-74,999	457	43.1	37.5	-	48.7	390	10.4	6.6	-	14.2
\$75,000+	1,776	43.2	40.2	-	46.1	1,503	6.8	5.2	-	8.4

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

† Insufficient data

¶ See p 65 for definition of disability

SECTION 7.3: 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 7.3 – SEXUAL VIOLENCE AMONG MASSACHUSETTS ADULTS, 2018										
	SEXUAL VIOLENCE, WOMEN					SEXUAL VIOLENCE, MEN				
	N	%	95% CI			N	%	95% CI		
OVERALL	1,267	24.6	21.1	-	28.0	1,044	5.7	3.9	-	7.6
AGE GROUP										
18–24	61	37.7	24.4	-	50.9	†				
25–34	114	36.3	24.3	-	48.3	†				
35–44	133	34.0	23.9	-	44.2	†				
45–54	221	18.7	12.9	-	24.6	†				
55–64	266	17.9	13.0	-	22.8	†				
65–74	259	19.7	13.8	-	25.6	†				
75 AND OLDER	†					†				
RACE-ETHNICITY*										
WHITE	1,050	25.3	21.4	-	29.2	849	5.4	3.3	-	7.6
BLACK	64	26.3	13.4	-	39.3	†				
HISPANIC	86	25.1	14.0	-	36.2	†				
ASIAN	†					†				
DISABILITY¶										
DISABILITY	344	33.7	25.7	-	41.7	238	9.9	4.2	-	15.5
NO DISABILITY	915	20.5	17.2	-	23.8	792	4.5	2.9	-	6.1
EDUCATION										
< HIGH SCHOOL	†					†				
HIGH SCHOOL	227	22.0	14.8	-	29.2	†				
COLLEGE 1–3 YRS	270	26.6	20.1	-	33.1	225	5.6	2.5	-	8.8
COLLEGE 4+ YRS	709	24.7	20.5	-	28.8	561	5.6	3.5	-	7.8
HOUSEHOLD INCOME										
<\$25,000	174	36.8	24.9	-	48.7	†				
\$25,000–34,999	103	25.0	14.5	-	35.4	†				
\$35,000–49,999	116	16.7	8.5	-	24.9	†				
\$50,000–74,999	141	20.4	12.6	-	28.2	†				
\$75,000+	490	22.3	17.8	-	26.8	488	4.8	2.7	-	7.0
* White, Black, and Asian race categories refer to non-Hispanic										
† Insufficient data										
¶ See p 65 for definition of disability										

SECTION 7.4: UNINTENTIONAL FALLS

Respondents ages 45 and older were asked if they had fallen in the past 12 months. They were also asked if they were injured by a fall in the past 12 months. A fall was defined as unintentionally coming to rest on the ground or another lower level. An injury from a fall was defined as one that caused the respondent to limit regular activities for at least a day or to go see a doctor. Presented here is the percentage of adults ages 65 and older who reported falling in the past 12 months and the percentage that were injured from a fall in the past 12 months.

TABLE 7.4 - UNINTENTIONAL FALLS, MASSACHUSETTS ADULTS 65 AND OLDER, 2018

	UNINTENTIONAL FALLS					INJURED BY UNINTENTIONAL FALL				
	N	%	95% CI			N	%	95% CI		
OVERALL	2,040	25.9	23.4	-	28.4	2,034	8.4	6.8	-	10.1
GENDER										
MALE	889	25.8	22.0	-	29.6	885	7.3	4.9	-	9.7
FEMALE	1,149	26.0	22.7	-	29.4	1,147	9.3	7.1	-	11.5
AGE GROUP										
65-74	1,203	25.0	21.8	-	28.1	1,199	7.8	5.8	-	9.8
75-84	603	26.2	21.4	-	31.0	601	8.2	4.9	-	11.4
85 AND OLDER	234	29.8	22.2	-	37.4	234	12.3	6.9	-	17.7
RACE-ETHNICITY*										
WHITE	1,822	26.2	23.6	-	28.8	1,817	7.7	6.2	-	9.1
BLACK	†					†				
HISPANIC	†					†				
ASIAN	†					†				
DISABILITY¶										
DISABILITY	754	36.6	31.8	-	41.4	751	14.1	10.6	-	17.6
NO DISABILITY	1,264	18.8	16.2	-	21.3	1,261	4.6	3.4	-	5.8
EDUCATION										
< HIGH SCHOOL	101	26.3	15.8	-	36.7	†				
HIGH SCHOOL	410	23.7	18.5	-	28.9	410	7.9	4.6	-	11.2
COLLEGE 1-3 YRS	487	23.9	19.5	-	28.4	484	7.7	5.0	-	10.4
COLLEGE 4+ YRS	1,035	28.8	25.5	-	32.0	1,032	9.0	6.9	-	11.1
HOUSEHOLD INCOME										
<\$25,000	289	31.7	23.7	-	39.7	287	11.1	5.1	-	17.1
\$25,000-34,999	199	29.2	20.8	-	37.5	198	8.1	3.8	-	12.5
\$35,000-49,999	259	24.9	18.3	-	31.6	258	6.5	2.9	-	10.0
\$50,000-74,999	274	27.0	20.4	-	33.6	274	10.9	6.7	-	15.1
\$75,000+	526	24.1	20.0	-	28.2	525	6.0	3.8	-	8.2

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

† Insufficient data

¶ See p 65 for definition of disability

SECTION 7.5: DRINKING AND DRIVING

All respondents were asked if they had had at least one alcoholic drink 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. Those who reported that they had had at least one alcoholic drink in the past month were asked how many times during the past 30 days they had driven after having too much to drink. Presented here is the percentage of all adults who reported driving at least one time during the past month after drinking too much in their opinion.

TABLE 7.5 – DRINKING AND DRIVING AMONG MASSACHUSETTS ADULTS, 2018				
	DRINKING AND DRIVING IN PAST 30 DAYS			
	N	%	95% CI	
OVERALL	6,045	2.5	1.9	3.0
GENDER				
MALE	2,760	3.8	2.8	4.8
FEMALE	3,268	1.2	0.6	1.7
AGE GROUP				
18–24	†			
25–34	626	4.7	2.3	7.0
35–44	†			
45–54	925	2.2	1.3	3.1
55–64	1,235	2.0	1.0	2.9
65–74	1,184	1.8	1.0	2.6
75 AND OLDER	†			
RACE-ETHNICITY*				
WHITE	4,822	2.7	2.0	3.3
BLACK	†			
HISPANIC	†			
ASIAN	†			
DISABILITY [¶]				
DISABILITY	1,541	2.7	1.3	4.1
NO DISABILITY	4,442	2.4	1.8	3.0
EDUCATION				
< HIGH SCHOOL	†			
HIGH SCHOOL	1,166	2.2	1.2	3.2
COLLEGE 1–3 YRS	1,371	2.7	1.6	3.8
COLLEGE 4+ YRS	3,186	2.1	1.6	2.7
HOUSEHOLD INCOME				
<\$25,000	†			
\$25,000–34,999	†			
\$35,000–49,999	†			
\$50,000–74,999	722	3.6	2.0	5.2
\$75,000+	2,287	3.2	2.1	4.4
* White, Black, and Asian race categories refer to non-Hispanic † Insufficient data ¶ See p 65 for definition of disability				

SECTION 7.6: SEATBELT USE

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

TABLE 7.6 – SEATBELT USE AMONG MASSACHUSETTS ADULTS, 2018				
	ALWAYS USE A SEATBELT			
	N	%	95% CI	
OVERALL	6,383	81.7	80.4	- 83.1
GENDER				
MALE	2,939	76.7	74.6	- 78.8
FEMALE	3,425	86.3	84.6	- 87.9
AGE GROUP				
18–24	481	78.1	73.6	- 82.6
25–34	763	73.8	69.5	- 78.0
35–44	701	82.1	78.5	- 85.8
45–54	953	84.8	82.1	- 87.5
55–64	1,266	82.2	79.4	- 85.1
65–74	1,198	85.5	82.7	- 88.2
75 AND OLDER	832	86.9	83.5	- 90.3
RACE-ETHNICITY*				
WHITE	5,101	82.1	80.6	- 83.6
BLACK	338	77.4	71.5	- 83.2
HISPANIC	480	78.4	73.7	- 83.1
ASIAN	227	86.0	80.9	- 91.1
DISABILITY [¶]				
DISABILITY	1,579	74.1	70.9	- 77.3
NO DISABILITY	4,732	84.1	82.7	- 85.6
EDUCATION				
< HIGH SCHOOL	294	66.4	59.4	- 73.3
HIGH SCHOOL	1,188	75.5	72.6	- 78.5
COLLEGE 1–3 YRS	1,435	82.1	79.6	- 84.6
COLLEGE 4+ YRS	3,438	89.4	88.1	- 90.7
HOUSEHOLD INCOME				
<\$25,000	847	74.9	70.8	- 78.9
\$25,000–34,999	443	78.2	72.9	- 83.5
\$35,000–49,999	597	80.0	75.8	- 84.3
\$50,000–74,999	774	81.4	77.6	- 85.1
\$75,000+	2,452	85.7	83.7	- 87.7
<p>* White, Black, and Asian race categories refer to non-Hispanic</p> <p>¶ See p 65 for definition of disability</p>				

SECTION 7.7: FAMILY PLANNING

All women ages 18-50 who had not had a hysterectomy and were not currently pregnant were asked whether they or their partners currently use some form of birth control. Presented below are the percentage of females ages 18-44 who reported that they or their partner use some form of birth control. The more restricted ages are presented here to be consistent with national data.

TABLE 7.7 – FAMILY PLANNING AMONG MASSACHUSETTS WOMEN, AGES 18-44, 2018					
	USE BIRTH CONTROL				
	N	%	95% CI		
OVERALL	317	67.0	60.5	-	73.5
AGE GROUP					
18–24	74	64.6	51.6	-	77.6
25–34	110	71.0	60.7	-	81.3
35–44	133	65.2	55.2	-	75.1
RACE-ETHNICITY*					
WHITE	196	72.1	63.9	-	80.3
BLACK	†				
HISPANIC	56	57.8	42.6	-	73.0
ASIAN	†				
DISABILITY¶					
DISABILITY	64	59.7	44.3	-	75.0
NO DISABILITY	248	71.0	64.0	-	78.1
EDUCATION					
< HIGH SCHOOL	†				
HIGH SCHOOL	60	58.4	44.3	-	72.6
COLLEGE 1–3 YRS	73	73.7	63.0	-	84.4
COLLEGE 4+ YRS	167	71.4	62.9	-	79.8
HOUSEHOLD INCOME					
<\$25,000	58	53.2	36.5	-	69.8
\$25,000–34,999	†				
\$35,000–49,999	†				
\$50,000–74,999	†				
\$75,000+	125	71.9	61.1	-	82.7
* White, Black, and Asian race categories refer to non-Hispanic † Insufficient Data ¶ See p 65 for definition of disability					

SECTION 7.8: 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 “non-medical” use of prescription pain killers or marijuana, and if so, if this use was in the previous year. “Non-medical” drug use was defined for respondents as using it six or more times to get high or experience pleasurable effects, see what the effects are like, or take with friends. Presented here are the percentages of adults who report that they have ever been prescribed an opiate or marijuana and the percent who report non-medical use of these drugs in the previous year.

TABLE 7.8.1 – OPIOID AMONG MASSACHUSETTS ADULTS, 2018

	EVER (LIFELONG) PRESCRIBED OPIATE				NON-MEDICAL USE OF OPIATE IN PAST YEAR			
	N	%	95% CI		N	%	95% CI	
OVERALL	2,721	43.1	40.7	- 45.4	2,735	1.0	0.6	- 1.4
GENDER								
MALE	1,236	42.5	39.1	- 45.8	1,241	1.8	1.0	- 2.7
FEMALE	1,481	43.5	40.1	- 46.8	†			
AGE GROUP								
18–24	172	23.2	16.3	- 30.2	†			
25–34	259	38.0	31.4	- 44.6	†			
35–44	311	45.1	38.3	- 51.9	†			
45–54	405	47.3	41.7	- 52.9	†			
55–64	556	53.3	48.2	- 58.4	†			
65–74	568	49.5	43.9	- 55.1	†			
75 AND OLDER	373	38.8	32.3	- 45.3	†			
RACE-ETHNICITY*								
WHITE	2,201	49.4	46.7	- 52.0	2,216	1.1	0.6	- 1.6
BLACK	146	26.8	18.1	- 35.5	†			
HISPANIC	199	26.1	19.4	- 32.9	†			
ASIAN	88	14.8	6.6	- 23.1	†			
DISABILITY¶								
DISABILITY	698	47.0	42.1	- 51.9	†			
NO DISABILITY	1,998	41.7	39.0	- 44.4	2,004	0.6	0.3	- 1.0
EDUCATION								
< HIGH SCHOOL	139	34.0	24.1	- 43.8	†			
HIGH SCHOOL	514	35.2	30.2	- 40.2	†			
COLLEGE 1–3 YRS	619	45.0	40.3	- 49.8	†			
COLLEGE 4+ YRS	1,442	49.0	45.8	- 52.1	†			
HOUSEHOLD INCOME								
<\$25,000	365	39.0	32.9	- 45.2	†			
\$25,000–34,999	188	36.7	27.8	- 45.6	†			
\$35,000–49,999	273	41.9	34.4	- 49.5	†			
\$50,000–74,999	357	42.4	35.8	- 49.0	†			
\$75,000+	1,015	50.5	46.5	- 54.4	†			

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

† Insufficient data

¶ See p 65 for definition of disability

TABLE 7.8.2 – MARIJUANA USE AMONG MASSACHUSETTS ADULTS, 2018

	EVER (LIFELONG) PRESCRIBED MARIJUANA			NON-MEDICAL USE OF MARIJUANA IN PAST YEAR			
	N	%	95% CI	N	%	95% CI	
OVERALL	2,769	2.9	2.1 - 3.7	2,734	12.9	11.2 - 14.7	
GENDER							
MALE	1,260	3.0	1.9 - 4.2	1,236	16.4	13.6 - 19.2	
FEMALE	1,505	2.9	1.7 - 4.0	1,494	9.9	7.8 - 12.0	
AGE GROUP							
18–24	†			169	25.8	18.4 - 33.2	
25–34	†			258	25.3	19.2 - 31.5	
35–44	†			307	14.8	10.6 - 19.0	
45–54	†			408	8.2	5.1 - 11.3	
55–64	562	2.5	1.1 - 3.9	560	9.4	6.0 - 12.8	
65–74	†			569	3.4	2.0 - 4.8	
75 AND OLDER	†			†			
RACE-ETHNICITY*							
WHITE	2,236	3.3	2.3 - 4.3	2,210	13.3	11.3 - 15.2	
BLACK	†			150	13.3	6.2 - 20.5	
HISPANIC	†			198	13.1	7.0 - 19.1	
ASIAN	†			†			
DISABILITY¶							
DISABILITY	716	5.6	3.5 - 7.8	710	14.8	11.2 - 18.5	
NO DISABILITY	2,028	2.0	1.2 - 2.8	2,001	12.5	10.5 - 14.5	
EDUCATION							
< HIGH SCHOOL	†			140	17.5	9.1 - 25.9	
HIGH SCHOOL	525	4.2	2.0 - 6.5	516	11.9	8.2 - 15.6	
COLLEGE 1–3 YRS	633	3.5	1.6 - 5.3	625	16.0	12.3 - 19.7	
COLLEGE 4+ YRS	1,462	2.1	1.3 - 2.9	1,446	10.4	8.4 - 12.3	
HOUSEHOLD INCOME							
<\$25,000	373	4.6	2.0 - 7.1	369	15.8	10.4 - 21.1	
\$25,000–34,999	†			†			
\$35,000–49,999	†			275	14.2	8.7 - 19.8	
\$50,000–74,999	†			355	16.5	11.2 - 21.9	
\$75,000+	1,022	2.3	1.1 - 3.5	1,019	13.2	10.5 - 16.0	

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

† Insufficient data

¶ See p 65 for definition of disability

APPENDIX

AGE-ADJUSTED PERCENTAGES FOR SELECTED TOPICS

MASSACHUSETTS BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM, 2018																				
	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	12.7	11.5	-	13.9	11.9	10.6	-	13.1	8.9	7.9	-	9.9	3.4	2.5	-	4.3	86.4	85.1	-	87.7
GENDER																				
MALE	14.2	12.5	-	15.9	10.3	8.8	-	11.8	8.4	7.2	-	9.7	4.9	3.5	-	6.3	81.5	79.6	-	83.4
FEMALE	13.1	11.6	-	14.6	14.1	12.3	-	15.9	10.4	8.9	-	11.9	3.2	1.9	-	4.4	90.1	88.6	-	91.6
RACE-ETHNICITY*																				
WHITE	11.8	10.6	-	13.0	13.6	12.1	-	15.1	9.6	8.4	-	10.8	2.8	1.8	-	3.7	87.5	86.1	-	88.9
BLACK	14.5	9.9	-	19.1	10.7	6.6	-	14.8	9.6	5.7	-	13.5	†				83.5	78.8	-	88.2
HISPANIC	27.1	22.1	-	32.1	11.0	10.1	-	11.8	11.3	7.9	-	14.7	†				81.9	78.0	-	85.8
ASIAN	9.8	4.9	-	14.8	4.8	2.1	-	7.6	†				†				82.8	78.0	-	87.7
DISABILITY¶																				
DISABILITY	37.3	33.6	-	40.9	31.3	27.4	-	35.2	27.2	23.8	-	30.6	7.2	4.4	-	10.0	85.2	82.3	-	88.1
NO DISABILITY	5.8	4.9	-	6.7	6.7	5.7	-	7.7	3.8	3.1	-	4.5	3.2	2.2	-	4.1	86.2	84.9	-	87.6
EDUCATION																				
< HIGH SCHOOL	32.0	26.3	-	37.8	20.5	14.9	-	26.1	16.9	12.3	-	21.4	12.1	11.3	-	12.8	81.1	75.7	-	86.5
HIGH SCHOOL	19.7	17.0	-	22.5	15.0	12.3	-	17.6	12.9	10.5	-	15.2	4.7	4.3	-	5.0	82.7	80.0	-	85.5
COLLEGE 1–3 YRS	13.3	11.1	-	15.6	14.2	11.8	-	16.5	10.4	8.4	-	12.3	3.0	1.6	-	4.4	87.0	84.8	-	89.1
COLLEGE 4+ YRS	5.5	4.7	-	6.4	7.1	6.0	-	8.2	4.9	4.1	-	5.7	2.2	1.1	-	3.2	87.3	85.7	-	89.0
HOUSEHOLD INCOME																				
<\$25,000	33.2	29.2	-	37.3	24.1	20.2	-	28.0	22.8	19.0	-	26.6	6.8	3.9	-	9.7	80.7	77.2	-	84.3
\$25,000–34,999	15.5	11.4	-	19.6	15.0	10.5	-	19.5	11.3	7.4	-	15.2	†				83.1	78.6	-	87.6
\$35,000–49,999	11.5	8.1	-	14.8	13.9	10.2	-	17.6	6.8	4.4	-	9.2	9.2	8.6	-	9.7	85.4	81.2	-	89.6
\$50,000–74,999	12.0	8.5	-	15.5	10.3	7.1	-	13.5	8.7	6.0	-	11.4	†				85.4	81.8	-	89.1
\$75,000+	5.3	4.1	-	6.4	6.8	5.3	-	8.2	4.2	3.2	-	5.2	†				89.8	88.0	-	91.6
* White, Black, and Asian race categories refer to non-Hispanic																				
† Insufficient data																				
¶ See p 65 for definition of disability																				

AGE-ADJUSTED PERCENTAGES FOR SELECTED TOPICS (CONTINUED)

MASSACHUSETTS BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM, 2018																				
	CHECKUP IN PAST YEAR				NO DOCTOR DUE TO COST				DENTAL VISIT IN PAST YEAR				SIX OR MORE TEETH MISSING				CURRENT SMOKER			
	%	95% CI			%	95% CI			%	95% CI			%	95% CI			%	95% CI		
OVERALL	78.5	76.9	-	80.0	9.5	8.3	-	10.6	74.5	72.8	-	76.2	10.8	9.8	-	11.7	13.8	12.4	-	15.2
GENDER																				
MALE	75.9	73.8	-	78.1	8.6	7.2	-	10.1	71.9	69.6	-	74.2	11.8	10.4	-	13.2	15.8	13.9	-	17.8
FEMALE	80.9	79.0	-	82.8	10.0	8.5	-	11.4	75.4	73.2	-	77.6	11.1	9.8	-	12.5	12.2	10.6	-	13.9
RACE-ETHNICITY*																				
WHITE	77.2	75.5	-	79.0	8.6	7.4	-	9.9	75.5	73.7	-	77.3	10.7	9.6	-	11.7	15.3	13.7	-	16.9
BLACK	83.5	78.7	-	88.3	13.3	9.1	-	17.4	69.3	63.5	-	75.2	19.0	14.2	-	23.8	11.9	7.6	-	16.2
HISPANIC	78.8	74.7	-	82.9	14.2	10.5	-	17.9	66.4	61.0	-	71.7	16.5	15.0	-	17.9	13.5	9.8	-	17.3
ASIAN	83.0	76.4	-	89.5	†				75.2	67.9	-	82.4	5.6	2.4	-	8.8	4.6	4.4	-	4.9
DISABILITY¶																				
DISABILITY	81.4	78.1	-	84.8	19.3	15.9	-	22.7	62.6	58.5	-	66.6	22.1	19.0	-	25.1	27.5	23.7	-	31.4
NO DISABILITY	77.2	75.5	-	78.8	6.4	5.4	-	7.3	77.6	75.9	-	79.3	8.0	7.0	-	8.9	10.2	9.1	-	11.4
EDUCATION																				
< HIGH SCHOOL	77.8	71.3	-	84.4	15.8	10.2	-	21.3	53.3	46.4	-	60.2	27.4	21.7	-	33.1	31.3	24.3	-	38.4
HIGH SCHOOL	76.5	73.2	-	79.9	10.6	8.3	-	13.0	66.0	62.3	-	69.6	18.8	16.3	-	21.3	21.2	18.0	-	24.4
COLLEGE 1–3 YRS	80.0	77.4	-	82.6	10.6	8.4	-	12.8	74.8	71.9	-	77.7	8.8	7.3	-	10.3	15.3	12.9	-	17.7
COLLEGE 4+ YRS	77.8	75.9	-	79.8	6.8	5.6	-	7.9	81.5	79.7	-	83.4	4.5	3.9	-	5.1	5.2	4.3	-	6.1
HOUSEHOLD INCOME																				
<\$25,000	78.3	74.7	-	81.9	17.3	13.8	-	20.8	59.7	55.2	-	64.2	23.6	20.4	-	26.9	25.4	21.6	-	29.3
\$25,000–34,999	77.9	71.8	-	84.0	20.5	14.4	-	26.6	63.3	56.3	-	70.3	14.4	10.6	-	18.2	20.2	14.4	-	26.0
\$35,000–49,999	77.2	72.2	-	82.3	13.2	9.5	-	16.9	73.3	68.4	-	78.2	12.7	9.2	-	16.1	19.0	14.4	-	23.6
\$50,000–74,999	77.9	73.4	-	82.5	12.2	8.1	-	16.4	73.4	68.7	-	78.1	12.4	9.4	-	15.4	15.3	10.7	-	19.8
\$75,000+	79.0	76.8	-	81.3	3.6	2.7	-	4.5	82.3	80.1	-	84.6	4.6	3.6	-	5.6	7.1	5.7	-	8.5
* White, Black, and Asian race categories refer to non-Hispanic																				
† Insufficient data																				
¶ See p 65 for definition of disability																				

AGE-ADJUSTED PERCENTAGES FOR SELECTED TOPICS (CONTINUED)

MASSACHUSETTS BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM, 2018																				
	FORMER SMOKER				USE SMOKELESS TOBACCO				USE E-CIGARETTES				QUIT ATTEMPT				NO SMOKING IN HOUSE			
	%	95% CI			%	95% CI			%	95% CI			%	95% CI			%	95% CI		
OVERALL	24.8	23.3	-	26.3	2.8	2.1	-	3.6	6.7	5.5	-	7.9	62.5	57.4	-	67.6	83.9	81.7	-	86.0
GENDER																				
MALE	25.8	23.9	-	27.8	4.4	3.2	-	5.6	7.9	6.4	-	9.3	60.5	58.4	-	62.6	82.0	79.2	-	84.8
FEMALE	22.5	20.6	-	24.4	1.2	0.6	-	1.8	4.9	3.4	-	6.3	59.6	57.8	-	61.3	85.8	83.0	-	88.5
RACE-ETHNICITY*																				
WHITE	27.1	25.5	-	28.8	3.1	2.2	-	4.0	7.5	6.1	-	9.0	61.0	55.7	-	66.2	82.9	80.6	-	85.2
BLACK	12.1	7.5	-	16.7	†				†				†				†			
HISPANIC	15.4	11.7	-	19.1	4.3	2.0	-	6.7	4.6	2.1	-	7.1	†				†			
ASIAN	9.1	6.6	-	11.7	†				2.8	2.5	-	3.1	†				†			
DISABILITY¶																				
DISABILITY	26.5	23.1	-	30.0	4.7	2.9	-	6.5	10.4	7.4	-	13.4	63.1	55.7	-	70.4	72.9	67.1	-	78.8
NO DISABILITY	23.4	22.0	-	24.9	2.3	1.6	-	3.0	5.0	4.1	-	6.0	57.5	55.9	-	59.2	86.9	84.9	-	88.8
EDUCATION																				
< HIGH SCHOOL	17.8	12.8	-	22.7	8.5	4.4	-	12.7	7.3	3.5	-	11.1	†				74.7	72.9	-	76.6
HIGH SCHOOL	29.7	26.4	-	33.0	4.0	2.1	-	5.9	7.6	5.4	-	9.8	60.3	57.5	-	63.2	79.5	74.6	-	84.4
COLLEGE 1–3 YRS	29.4	26.5	-	32.3	2.7	1.5	-	3.9	7.9	5.8	-	10.0	62.1	60.5	-	63.7	80.5	76.4	-	84.5
COLLEGE 4+ YRS	19.1	17.6	-	20.6	1.0	0.5	-	1.5	4.0	2.9	-	5.2	†				90.7	88.6	-	92.7
HOUSEHOLD INCOME																				
<\$25,000	20.4	16.8	-	24.0	4.2	2.1	-	6.3	7.0	4.0	-	10.0	†				73.8	68.2	-	79.5
\$25,000–34,999	24.3	18.4	-	30.1	†				5.1	2.1	-	8.1	65.5	63.4	-	67.6	72.7	62.3	-	83.1
\$35,000–49,999	26.2	21.4	-	30.9	†				10.1	6.4	-	13.7	67.0	63.3	-	70.6	†			
\$50,000–74,999	29.4	25.3	-	33.5	†				8.2	4.7	-	11.7	61.5	61.0	-	61.9	†			
\$75,000+	24.7	22.7	-	26.8	1.9	1.0	-	2.7	5.6	3.9	-	7.2	58.8	56.8	-	60.7	90.4	87.9	-	92.8
* White, Black, and Asian race categories refer to non-Hispanic																				
† Insufficient data																				
¶ See p 65 for definition of disability																				

AGE-ADJUSTED PERCENTAGES FOR SELECTED TOPICS (CONTINUED)

MASSACHUSETTS BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM, 2018																				
	BINGE DRINKING				HEAVY DRINKING				OVERWEIGHT (BMI≥25.0)				OBESE (BMI≥30.0)				ANY PHYSICAL ACTIVITY IN PAST MONTH			
	%	95% CI			%	95% CI			%	95% CI			%	95% CI			%	95% CI		
OVERALL	22.5	20.9	-	24.2	8.6	7.5	-	9.6	61.7	59.8	-	63.6	26.0	24.4	-	27.7	79.8	78.3	-	81.3
GENDER																				
MALE	24.9	22.7	-	27.1	8.2	6.8	-	9.7	69.2	67.0	-	71.5	27.0	24.9	-	29.2	80.2	78.3	-	82.2
FEMALE	17.5	15.5	-	19.6	7.7	6.5	-	8.9	53.2	50.7	-	55.7	24.5	22.3	-	26.7	76.6	74.5	-	78.7
RACE-ETHNICITY*																				
WHITE	23.4	21.6	-	25.2	9.4	8.1	-	10.6	60.3	58.3	-	62.2	26.2	24.4	-	28.0	81.1	79.5	-	82.6
BLACK	16.3	10.7	-	21.8	5.3	2.2	-	8.4	69.7	63.8	-	75.6	25.9	20.2	-	31.6	70.4	64.4	-	76.4
HISPANIC	17.9	16.9	-	18.9	3.8	2.8	-	4.7	73.8	68.9	-	78.7	29.9	24.6	-	35.2	62.1	56.9	-	67.4
ASIAN	12.4	6.9	-	17.8	2.0	1.9	-	2.1	35.6	31.3	-	39.9	6.7	4.8	-	8.6	85.6	79.6	-	91.6
DISABILITY†																				
DISABILITY	23.8	19.8	-	27.8	8.9	6.2	-	11.5	66.1	62.2	-	70.0	35.4	31.4	-	39.4	64.0	60.3	-	67.6
NO DISABILITY	20.1	18.6	-	21.7	7.9	6.9	-	8.9	60.1	58.2	-	62.0	22.7	21.0	-	24.3	83.2	81.7	-	84.7
EDUCATION																				
< HIGH SCHOOL	21.8	15.5	-	28.1	8.3	4.0	-	12.5	66.0	57.4	-	74.6	27.7	21.3	-	34.2	57.0	49.9	-	64.1
HIGH SCHOOL	21.8	18.3	-	25.2	6.8	4.8	-	8.7	67.7	64.0	-	71.5	30.3	26.6	-	33.9	68.8	65.3	-	72.2
COLLEGE 1–3 YRS	21.7	18.6	-	24.7	8.8	6.9	-	10.7	64.1	60.8	-	67.4	29.8	26.7	-	32.9	79.8	77.1	-	82.5
COLLEGE 4+ YRS	21.8	19.9	-	23.7	8.6	7.3	-	9.9	54.5	52.2	-	56.8	19.9	18.1	-	21.7	88.7	87.5	-	90.0
HOUSEHOLD INCOME																				
<\$25,000	19.5	15.4	-	23.6	5.6	3.7	-	7.6	63.3	58.7	-	67.8	31.2	26.7	-	35.7	60.9	56.5	-	65.3
\$25,000–34,999	15.3	9.7	-	21.0	8.2	3.7	-	12.6	67.8	61.2	-	74.4	29.5	22.8	-	36.2	69.3	63.5	-	75.1
\$35,000–49,999	19.0	14.5	-	23.4	6.9	4.4	-	9.4	62.7	57.3	-	68.0	26.0	20.8	-	31.1	79.0	74.3	-	83.8
\$50,000–74,999	28.5	23.4	-	33.6	8.4	5.5	-	11.2	65.6	60.7	-	70.6	26.2	21.9	-	30.6	80.5	76.6	-	84.5
\$75,000+	24.2	21.9	-	26.6	10.5	8.7	-	12.2	59.5	56.9	-	62.1	23.8	21.6	-	26.0	88.4	86.6	-	90.2
* White, Black, and Asian race categories refer to non-Hispanic † Insufficient data ¶ See p 65 for definition of disability																				

AGE-ADJUSTED PERCENTAGES FOR SELECTED TOPICS (CONTINUED)

MASSACHUSETTS BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM, 2018																				
	RECEIVED 3 SHOTS HBV VACCINE				PRE-DIABETES				DIABETES				EVER HAD ASTHMA				CURRENTLY HAVE ASTHMA			
	%	95% CI			%	95% CI			%	95% CI			%	95% CI			%	95% CI		
OVERALL	45.8	42.7	-	48.8	9.5	7.9	-	11.1	7.8	6.9	-	8.7	15.4	14.0	-	16.8	10.2	9.0	-	11.3
GENDER																				
MALE	36.0	32.2	-	39.8	11.9	9.6	-	14.2	9.6	8.4	-	10.9	13.4	11.7	-	15.0	7.2	6.0	-	8.3
FEMALE	50.7	46.7	-	54.6	7.4	5.7	-	9.2	6.4	5.4	-	7.4	17.4	15.5	-	19.2	13.1	11.5	-	14.8
RACE-ETHNICITY*																				
WHITE	43.4	40.2	-	46.6	8.4	6.9	-	9.8	6.8	5.9	-	7.6	16.7	15.1	-	18.3	10.8	9.6	-	12.1
BLACK	†				6.9	6.2	-	7.5	11.9	7.9	-	15.8	12.5	8.6	-	16.4	9.6	6.0	-	13.2
HISPANIC	†				†				15.7	11.5	-	19.8	16.8	12.9	-	20.7	12.6	9.0	-	16.1
ASIAN	†				†				10.1	4.8	-	15.4	5.6	2.9	-	8.4	†			
DISABILITY¶																				
DISABILITY	41.2	34.7	-	47.6	13.4	9.5	-	17.3	14.0	11.8	-	16.2	24.5	20.9	-	28.1	17.1	14.1	-	20.0
NO DISABILITY	44.4	41.2	-	47.5	8.6	7.1	-	10.2	5.5	4.8	-	6.3	12.8	11.6	-	14.1	8.1	7.0	-	9.1
EDUCATION																				
< HIGH SCHOOL	34.1	33.9	-	34.3	16.2	14.7	-	17.7	11.4	8.0	-	14.7	18.6	13.2	-	23.9	13.4	8.6	-	18.2
HIGH SCHOOL	†				11.0	7.8	-	14.2	10.6	8.6	-	12.6	15.6	12.8	-	18.3	9.6	7.5	-	11.7
COLLEGE 1–3 YRS	43.4	42.2	-	44.7	9.2	7.7	-	10.8	8.7	7.0	-	10.4	16.3	13.9	-	18.7	11.3	9.2	-	13.5
COLLEGE 4+ YRS	52.6	48.8	-	56.5	7.6	5.9	-	9.4	5.0	4.1	-	5.8	14.0	12.5	-	15.6	9.1	7.8	-	10.3
HOUSEHOLD INCOME																				
<\$25,000	38.1	36.8	-	39.4	12.7	11.8	-	13.5	15.3	12.2	-	18.5	20.2	16.6	-	23.9	14.1	11.1	-	17.1
\$25,000–34,999	37.3	35.9	-	38.6	9.2	8.4	-	10.0	9.1	5.7	-	12.5	17.3	11.7	-	22.9	12.3	7.2	-	17.3
\$35,000–49,999	41.8	39.9	-	43.6	6.9	6.7	-	7.0	6.7	4.4	-	9.0	15.8	14.3	-	17.2	9.4	7.8	-	11.0
\$50,000–74,999	38.6	37.5	-	39.7	15.9	13.3	-	18.6	7.5	5.7	-	9.4	11.4	8.6	-	14.2	7.6	5.3	-	9.9
\$75,000+	53.5	49.1	-	57.9	7.4	5.5	-	9.3	5.3	4.3	-	6.4	14.5	12.4	-	16.5	9.2	7.5	-	10.8
* White, Black, and Asian race categories refer to non-Hispanic																				
† Insufficient data																				
¶ See p 65 for definition of disability																				

AGE-ADJUSTED PERCENTAGES FOR SELECTED TOPICS (CONTINUED)

MASSACHUSETTS BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM, 2018																				
	EVER DIAGNOSED WITH COPD				EVER DIAGNOSED WITH CANCER				EVER DIAGNOSED WITH DEPRESSION				SELF-IDENTIFIED AS HOMOSEXUAL, BISEXUAL, OR OTHER				SEXUAL VIOLENCE - WOMEN			
	%	95% CI			%	95% CI			%	95% CI			%	95% CI			%	95% CI		
OVERALL	4.5	3.8	-	5.2	10.1	9.2	-	10.9	18.8	17.3	-	20.3	7.6	6.4	-	8.9	26.9	25.1	-	28.7
GENDER																				
MALE	4.0	3.2	-	4.8	9.3	8.2	-	10.4	13.8	12.2	-	15.4	6.1	4.8	-	7.3	n/a			
FEMALE	5.2	4.2	-	6.2	10.6	9.5	-	11.7	23.6	21.4	-	25.7	10.1	8.1	-	12.0	26.9	25.1	-	28.7
RACE-ETHNICITY*																				
WHITE	4.4	3.7	-	5.1	11.0	10.1	-	12.0	20.6	18.9	-	22.3	8.2	6.8	-	9.6	29.2	24.5	-	33.9
BLACK	†				3.7	1.7	-	5.6	17.1	11.8	-	22.4	†				†			
HISPANIC	4.5	2.2	-	6.8	7.1	4.1	-	10.0	21.1	16.6	-	25.6	9.2	6.1	-	12.4	†			
ASIAN	†				†				6.9	2.9	-	10.8	8.2	5.9	-	10.5	†			
DISABILITY¶																				
DISABILITY	10.3	8.1	-	12.4	11.9	10.1	-	13.7	43.9	40.0	-	47.9	14.7	11.2	-	18.2	42.2	34.4	-	49.9
NO DISABILITY	2.6	2.1	-	3.1	9.3	8.5	-	10.2	12.0	10.8	-	13.3	6.3	5.2	-	7.4	21.2	17.6	-	24.8
EDUCATION																				
< HIGH SCHOOL	10.1	6.5	-	13.7	8.9	5.7	-	12.2	28.2	21.9	-	34.4	9.5	4.4	-	14.5	30.4	30.4	-	30.5
HIGH SCHOOL	5.4	3.9	-	6.9	10.0	8.4	-	11.6	20.3	17.1	-	23.5	7.2	4.9	-	9.5	21.8	17.9	-	25.8
COLLEGE 1–3 YRS	5.2	4.0	-	6.3	9.2	7.6	-	10.8	21.9	19.1	-	24.7	8.4	6.4	-	10.5	28.7	26.6	-	30.7
COLLEGE 4+ YRS	2.5	1.9	-	3.1	10.8	9.8	-	11.8	13.9	12.5	-	15.4	7.4	5.7	-	9.0	26.5	21.2	-	31.7
HOUSEHOLD INCOME																				
<\$25,000	10.1	7.8	-	12.4	9.9	7.5	-	12.3	34.2	29.9	-	38.5	11.5	7.6	-	15.4	36.8	33.0	-	40.5
\$25,000–34,999	9.4	4.7	-	14.1	8.9	6.3	-	11.5	21.9	16.0	-	27.8	6.8	3.5	-	10.0	28.2	27.5	-	29.0
\$35,000–49,999	4.1	2.3	-	5.9	9.1	6.5	-	11.6	21.2	16.2	-	26.2	9.2	5.5	-	12.8	21.7	20.2	-	23.1
\$50,000–74,999	4.3	2.6	-	5.9	8.7	6.7	-	10.7	18.1	13.8	-	22.4	4.4	2.1	-	6.7	21.0	19.8	-	22.3
\$75,000+	1.9	1.3	-	2.5	10.9	9.7	-	12.2	12.9	11.1	-	14.7	6.6	4.8	-	8.4	24.3	18.8	-	29.7
* White, Black, and Asian race categories refer to non-Hispanic																				
† Insufficient data																				
¶ See p 65 for definition of disability																				

AGE-ADJUSTED PERCENTAGES FOR SELECTED TOPICS (CONTINUED)

MASSACHUSETTS BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM, 2018																
	EVER TESTED FOR HIV - AGES 18-64				TESTED FOR HIV IN PAST YEAR - AGES 18-64				ALWAYS USE A SEATBELT				DRINKING AND DRIVING			
	%	95% CI			%	95% CI			%	95% CI			%	95% CI		
OVERALL	49.3	47.1	-	51.5	12.5	10.8	-	14.2	81.6	80.0	-	83.1	2.9	2.1	-	3.6
GENDER																
MALE	44.0	41.2	-	46.9	11.5	9.4	-	13.6	76.1	73.8	-	78.3	4.0	2.9	-	5.1
FEMALE	52.6	49.8	-	55.4	13.3	11.0	-	15.5	85.7	83.9	-	87.5	1.3	0.7	-	1.9
RACE-ETHNICITY*																
WHITE	47.7	45.3	-	50.1	10.8	9.0	-	12.6	81.2	79.5	-	83.0	3.0	2.1	-	3.8
BLACK	†				†				77.4	71.8	-	83.0	†			
HISPANIC	†				†				79.3	74.9	-	83.8	†			
ASIAN	†				†				87.5	82.3	-	92.8	†			
DISABILITY¶																
DISABILITY	58.6	53.9	-	63.4	21.6	17.0	-	26.1	71.2	67.3	-	75.2	†			
NO DISABILITY	45.7	43.4	-	47.9	10.3	8.7	-	11.8	83.8	82.3	-	85.3	2.5	1.9	-	3.1
EDUCATION																
< HIGH SCHOOL	51.8	48.3	-	55.3	18.0	17.7	-	18.2	66.2	58.8	-	73.5	†			
HIGH SCHOOL	46.5	45.3	-	47.6	14.2	14.0	-	14.5	74.0	70.6	-	77.4	2.5	1.3	-	3.7
COLLEGE 1–3 YRS	53.1	49.2	-	57.0	14.6	11.0	-	18.1	81.4	78.7	-	84.2	2.9	1.7	-	4.2
COLLEGE 4+ YRS	46.9	44.2	-	49.6	9.2	7.5	-	11.0	88.4	86.8	-	89.9	2.2	1.6	-	2.8
HOUSEHOLD INCOME																
<\$25,000	59.1	54.1	-	64.1	22.3	21.6	-	23.0	74.6	70.6	-	78.7	†			
\$25,000–34,999	57.0	56.7	-	57.4	†				78.3	72.1	-	84.6	†			
\$35,000–49,999	53.8	52.0	-	55.6	13.4	12.0	-	14.8	78.7	73.9	-	83.6	†			
\$50,000–74,999	48.1	47.7	-	48.5	12.8	12.7	-	12.9	80.2	75.8	-	84.6	3.7	1.9	-	5.5
\$75,000+	44.5	41.4	-	47.6	7.8	5.9	-	9.7	85.5	83.3	-	87.6	3.6	2.2	-	4.9
* White, Black, and Asian race categories refer to non-Hispanic																
† Insufficient data																
¶ See p 65 for definition of disability																

AGE-ADJUSTED PERCENTAGES FOR SELECTED TOPICS (CONTINUED)

MASSACHUSETTS BEHAVIORAL RISK FACTOR SURVEILLANCE							
	EVER PRESCRIBED OPIATE			NON-MEDICAL USE OF MARIJUANA IN PAST YEAR			
	%	95% CI		%	95% CI		
OVERALL	44.3	41.5	- 47.0	14.9	12.8	- 17.1	
GENDER							
MALE	42.2	38.7	- 45.7	17.3	14.3	- 20.2	
FEMALE	42.9	39.3	- 46.5	11.4	9.0	- 13.7	
RACE-ETHNICITY*							
WHITE	49.4	46.4	- 52.3	15.8	13.4	- 18.1	
BLACK	28.3	26.2	- 30.5	†			
HISPANIC	†			†			
ASIAN	15.5	14.2	- 16.8	4.5	3.9	- 5.0	
DISABILITY¶							
DISABILITY	48.5	42.6	- 54.4	19.4	14.8	- 24.1	
NO DISABILITY	41.4	38.6	- 44.1	12.9	10.9	- 15.0	
EDUCATION							
< HIGH SCHOOL	34.9	33.4	- 36.5	21.3	19.4	- 23.1	
HIGH SCHOOL	35.9	30.6	- 41.3	12.5	8.5	- 16.4	
COLLEGE 1–3 YRS	48.1	42.9	- 53.3	18.0	13.8	- 22.2	
COLLEGE 4+ YRS	47.1	43.6	- 50.6	12.2	9.8	- 14.7	
HOUSEHOLD INCOME							
<\$25,000	40.5	34.1	- 46.9	16.9	11.4	- 22.4	
\$25,000–34,999	35.4	25.7	- 45.1	†			
\$35,000–49,999	42.4	40.8	- 44.0	16.7	15.8	- 17.7	
\$50,000–74,999	41.7	34.3	- 49.1	20.4	19.6	- 21.2	
\$75,000+	49.2	45.1	- 53.3	14.5	11.4	- 17.6	
* White, Black, and Asian race categories refer to non-Hispanic † Insufficient data ¶ See p 65 for definition of disability							

MASSACHUSETTS AND NATIONAL ESTIMATES

MASSACHUSETTS BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM, 2018			
VARIABLES	MA %	US MEDIAN [†] %	US RANGE [†] %
OVERALL HEALTH MEASURES			
FAIR OR POOR HEALTH	14.2	17.3	13.4 – 35.0
15+ POOR MENTAL HEALTH DAYS	12.0	11.8	8.1 – 18.0
15+ DAYS IN POOR PHYSICAL HEALTH	9.8	11.1	8.0 – 18.0
HEALTH CARE ACCESS AND UTILIZATION			
HAVE PERSONAL HEALTH CARE PROVIDER	86.7	77.7	63.0 – 86.7
COULD NOT SEE DOCTOR DUE TO COST	8.8	12.2	7.3 – 18.4
CHECKUP IN PAST YEAR	79.7	77.0	68.3 – 84.1
DENTAL VISIT IN THE PAST YEAR	74.4	67.6	54.1 – 76.5
6 OR MORE TEETH MISSING	12.6	14.6	8.4 – 28.7
RISK FACTORS AND PREVENTIVE BEHAVIORS			
CURRENT SMOKER	13.4	16.1	9.0 – 25.2
FORMER SMOKER	25.1	24.8	15.9 – 31.9
USE SMOKELESS TOBACCO	2.6	4.2	0.4 – 9.7
QUIT ATTEMPT AMONG CURRENT SMOKERS	59.9	56.6	50.6 – 70.8
BINGE DRINKING	19.9	16.2	10.6 – 24.4
HEAVY DRINKING	8.0	6.4	3.8 – 8.8
OVERWEIGHT (BMI≥25.0)	61.6	66.5	55.8 – 73.3
OBESITY (BMI≥30.0)	25.7	30.9	22.9 – 39.5
PHYSICAL ACTIVITY IN PAST MONTH	77.6	76.2	52.7 – 83.6
FLU VACCINE IN PAST YEAR (50-64)	39.4	36.0	22.2 – 45.5
FLU VACCINE IN PAST YEAR (65+)	54.5	54.9	40.4 – 65.6
EVER HAD PNEUMONIA VACCINATION (65+)	73.4	73.4	31.1 – 78.6
CHRONIC HEALTH CONDITIONS			
DIABETES	8.6	11.0	7.0 – 16.2
EVER HAD ASTHMA	15.2	14.7	11.4 – 18.5
CURRENTLY HAVE ASTHMA	10.2	9.4	5.0 – 12.3
COPD	5.1	6.4	3.9 – 15.3
MYOCARDIAL INFARCTION (35+)	5.6	6.2	3.9 – 11.2
ANGINA (35+)	4.7	5.8	3.6 – 11.0
STROKE (35+)	3.4	4.4	2.1 – 7.5
EVER DIAGNOSED WITH DEPRESSION	18.1	19.6	7.7 – 26.6
EVER DIAGNOSED WITH CANCER	11.3	12.1	3.6 – 15.6
CANCER SCREENING			
MET RECOMMENDATION FOR COLORECTAL CANCER SCREENING	77.1	69.6	40.3 – 77.1
MAMMOGRAPHY IN PAST 2 YRS (50-74)	86.7	78.2	67.0 – 87.0
PAP SMEAR IN PAST THREE YEARS (21-65)	83.2	80.1	67.8 – 85.1
OTHER TOPICS			
EVER TESTED FOR HIV (18-64)	45.5	44.9	24.9 – 76.8
DRINKING & DRIVING	2.5	1.7	0.7 – 3.4
UNINTENTIONAL FALLS (65+)	25.9	27.1	18.8 – 33.9
INJURY FROM UNINTENTIONAL FALL (65+)	8.4	9.7	7.4 – 13.2
SEATBELT USE	81.7	86.3	68.8 – 93.1
[†] The US median percentage and range are based on data for all 50 states, District of Columbia, and Puerto Rico.			

TERMS, DEFINITIONS AND STATISTICAL METHODOLOGY

This report presents data from the **combined sample** - both landline and cell phone respondents. The combined sample contained 6,669 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 1,173 landline respondents and 1,902 cell phone respondents,
 - Split 2 contained 1,131 landline respondents and 1,968 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.ⁱ

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 deaf or do you have serious difficulty hearing?
2. Are you blind or do you have serious difficulty seeing, even when wearing glasses?
3. Because of a physical, mental, or emotional condition, do you have serious difficulty concentrating, remembering or making decisions?
4. Do you have serious difficulty walking or climbing stairs?
5. Do you have difficulty dressing or bathing?
6. 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.

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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.
- Telephone interviews are conducted in English, Spanish and Portuguese. Persons unable to complete a telephone interview in one of these three languages are not represented in this sample
