# A Profile of Health among Massachusetts Adults, 2015 

## Results from the Behavioral Risk Factor Surveillance System

Health Survey Program Office of Data Management and Outcomes Assessment Massachusetts Department of Public Health



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Results from the Behavioral Risk Factor Surveillance System

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## INTRODUCTION

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

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

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

In 2015, 4,276 landline interviews and 5,018 cell phone interviews were completed among Massachusetts adults. To increase the number of respondents who belong to racial and/or ethnic minority groups, the cities of Boston, Brockton, Lowell, Lynn, New Bedford, Quincy, Springfield, and Worcester were oversampled. 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 2015 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 2015 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 2015 in a separate table.

All percentages in this report are weighted (see definition on page 60) to represent the total Massachusetts population in 2015.

## Demographic Characteristics of Respondents

## Massachusetts Behavioral Risk Factor Surveillance System, 2015

|  | Unweighted Sample Size N | Weighted Percent $\% \dagger$ |
| :---: | :---: | :---: |
| Overall | 9,294 | 100.0 |
| GEnder |  |  |
| MALE | 4,145 | 47.9 |
| FEMALE | 5,149 | 52.1 |
| AgE Group |  |  |
| 18-24 | 661 | 13.2 |
| 25-34 | 1,150 | 17.0 |
| 35-44 | 1,120 | 15.5 |
| 45-54 | 1,653 | 17.3 |
| 55-64 | 1,877 | 16.9 |
| 65-74 | 1,549 | 11.3 |
| 75 AND OLDER | 1,074 | 8.8 |
| RACE-ETHNICITY* |  |  |
| WHITE | 7,372 | 77.1 |
| BLACK | 555 | 6.6 |
| HISPANIC | 748 | 9.9 |
| ASIAN | 292 | 6.4 |
| DISABILITY ${ }^{\text {dI }}$ |  |  |
| DISABILITY | 2,862 | 29.4 |
| NO DISABILITY | 5,894 | 70.6 |
| Education |  |  |
| < HIGH SCHOOL | 652 | 11.0 |
| HIGH SCHOOL | 2,122 | 26.2 |
| COLLEGE 1-3 YRS | 2,174 | 26.8 |
| COLLEGE 4+ YRS | 4,272 | 36.0 |
| Household Income |  |  |
| < 25 ,000 | 1,765 | 22.2 |
| \$25,000-34,999 | 647 | 8.5 |
| \$35,000-49,999 | 871 | 12.0 |
| \$50,000-74,999 | 1,004 | 13.1 |
| \$75,000+ | 2,930 | 44.2 |
| * White, Black, and Asian race categories refer to non-Hispanic <br> $\dagger$ See BRFSS methodology in "Terms, Definitions and Methodology Used in this Report" |  |  |
| II See p 61 for definition of disability |  |  |

## Section 1: Overall Health Measures

## Section 1.1: Overall Health Status

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

| Table 1.1-Overall Health Status Among Massachusetts Adults, 2015 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Fair or Poor Health |  |  |  |
|  | N | \% | 95\% CI |  |
| Overall | 9,260 | 14.6 | 13.6 | - 15.6 |
| Gender |  |  |  |  |
| male | 4,129 | 14.1 | 12.5 | - 15.6 |
| female | 5,131 | 15.1 | 13.7 | - 16.5 |
| Age Group |  |  |  |  |
| 18-24 | 660 | 10.3 | 6.9 | - 13.8 |
| 25-34 | 1,144 | 10.9 | 8.4 | - 13.5 |
| 35-44 | 1,118 | 11.2 | 8.8 | - 13.7 |
| 45-54 | 1,650 | 15.1 | 12.8 | - 17.4 |
| 55-64 | 1,868 | 16.9 | 14.5 | - 19.3 |
| 65-74 | 1,544 | 17.5 | 14.7 | - 20.2 |
| 75 AND OLDER | 1,067 | 26.5 | 22.4 | - 30.5 |
| Race-ethnicity* |  |  |  |  |
| white | 7,348 | 12.9 | 11.8 | - 14.1 |
| BLACK | 552 | 18.5 | 13.9 | - 23.1 |
| HISPANIC | 745 | 26.4 | 22.4 | - 30.3 |
| ASIAN | 290 | 11.3 | 6.3 | - 16.3 |
| Disability ${ }^{\text {II }}$ |  |  |  |  |
| disability | 2,843 | 37.8 | 35.1 | - 40.5 |
| No disability | 5,881 | 5.2 | 4.4 | - 6.0 |
| Education |  |  |  |  |
| < HIGH SCHOOL | 641 | 38.0 | 32.8 | - 43.2 |
| HIGH SCHOOL | 2,115 | 17.9 | 15.9 | - 19.9 |
| COLLEGE 1-3 YRS | 2,165 | 14.2 | 12.0 | - 16.3 |
| COLLEGE 4+ YRS | 4,267 | 5.6 | 4.8 | - 6.5 |
| Household Income |  |  |  |  |
| <\$25,000 | 1,752 | 31.8 | 28.7 | - 34.8 |
| \$25,000-34,999 | 646 | 20.8 | 16.4 | - 25.2 |
| \$35,000-49,999 | 869 | 12.1 | 9.0 | - 15.1 |
| \$50,000-74,999 | 1,002 | 10.4 | 7.5 | - 13.3 |
| \$75,000+ | 2,928 | 4.6 | 3.3 | - 5.8 |
| * White, Black, and Asian race categories refer to non-Hispanic <br> II See p 61 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, 2015 |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Overall | 15+ Days of Poor Physical Health$\mathrm{N} \quad \% \quad 95 \% \mathrm{CL}$ |  |  |  |  | 15+ Days of Poor Mental Health |  |  |  |  |
|  | 9,003 | 10.0 | 9.1 | - | 10.9 | 9,084 | 11.0 | 10.0 | - | 11.9 |
| Gender |  |  |  |  |  |  |  |  |  |  |
| male | 4,028 | 8.9 | 7.6 | - | 10.1 | 4,048 | 9.5 | 8.0 | - | 11.1 |
| Female | 4,975 | 11.1 | 9.8 | - | 12.3 | 5,036 | 12.2 | 10.9 | - | 13.6 |
|  |  |  |  |  |  |  |  |  |  |  |
| 18-24 | 650 | 4.6 | 2.4 | - | 6.8 | 654 | 14.4 | 9.9 | - | 18.9 |
| 25-34 | 1,131 | 5.3 | 3.5 | - | 7.2 | 1,134 | 11.6 | 9.0 | - | 14.2 |
| 35-44 | 1,101 | 9.2 | 6.7 | - | 11.6 | 1,104 | 10.5 | 8.1 | - | 12.8 |
| 45-54 | 1,617 | 12.3 | 10.1 | - | 14.5 | 1,613 | 13.0 | 10.9 | - | 15.1 |
| 55-64 | 1,814 | 13.0 | 10.8 | - | 15.2 | 1,840 | 11.1 | 9.2 | - | 13.1 |
| 65-74 | 1,489 | 12.0 | 9.6 | - | 14.4 | 1,510 | 6.3 | 4.7 | - | 8.0 |
| 75 AND OLDER | 997 | 17.3 | 13.8 | - | 20.9 | 1,025 | 7.7 | 5.3 | - | 10.0 |
| Race-Ethnicity* |  |  |  |  |  |  |  |  |  |  |
| white | 7,169 | 9.9 | 8.9 | - | 10.9 | 7,232 | 11.3 | 10.1 | - | 12.5 |
| BLACK | 530 | 13.8 | 9.2 | - | 18.5 | 539 | 15.0 | 10.7 | - | 19.4 |
| HISPANIC | 712 | 10.7 | 8.2 | - | 13.3 | 715 | 10.4 | 7.7 | - | 13.1 |
| ASIAN | $\dagger$ |  |  | - |  | $\dagger$ |  |  | - |  |
| Disability ${ }^{\text {II }}$ |  |  |  |  |  |  |  |  |  |  |
| disability | 2,704 | 29.2 | 26.7 | - | 31.8 | 2,756 | 26.4 | 23.9 | - | 28.9 |
| No disability | 5,784 | 2.4 | 1.9 | - | 3.0 | 5,817 | 5.1 | 4.1 | - | 6.1 |
| Education |  |  |  |  |  |  |  |  |  |  |
| < HIGH SCHOOL | 610 | 24.1 | 19.5 | - | 28.7 | 618 | 18.6 | 13.5 | - | 23.6 |
| HIGH SCHOOL | 2,021 | 11.5 | 9.7 | - | 13.2 | 2,052 | 13.7 | 11.6 | - | 15.8 |
| COLLEGE 1-3 YRS | 2,107 | 10.5 | 8.8 | - | 12.3 | 2,125 | 12.1 | 10.0 | - | 14.1 |
| COLLEGE 4+ YRS | 4,202 | 4.6 | 3.8 | - | 5.4 | 4,220 | 6.1 | 5.2 | - | 6.9 |
| Household Income |  |  |  |  |  |  |  |  |  |  |
| <\$25,000 | 1,677 | 21.9 | 19.2 | - | 24.6 | 1,702 | 21.4 | 18.7 | - | 24.1 |
| \$25,000-34,999 | 615 | 15.0 | 10.7 | - | 19.3 | 623 | 11.4 | 7.5 | - | 15.3 |
| \$35,000-49,999 | 852 | 7.0 | 5.0 | - | 9.1 | 860 | 13.8 | 8.7 | - | 18.9 |
| \$50,000-74,999 | 992 | 8.7 | 5.9 | - | 11.5 | 990 | 7.2 | 5.0 | - | 9.4 |
| \$75,000+ | 2,901 | 4.2 | 3.2 | - | 5.3 | 2,913 | 5.8 | 4.5 | - | 7.2 |
| * White, Black, and Asian race categories refer to non-Hispanic <br> $\dagger$ Insufficient data |  |  |  |  |  |  |  |  |  |  |
| II See p 61 for definition of disability |  |  |  |  |  |  |  |  |  |  |

## Section 1.3: Disability

In 2015, respondents were asked about disabilities and activity limitations. Respondents were classified as having a disability if they answered "yes" to one or more of the following questions:

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

| Table 1.3 - Disability Among Massachusetts Addults, 2015 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Have Disabilityyl |  |  |  |
|  | N | \% |  | CI |
|  |  |  |  |  |
| Gender |  |  |  |  |
| male | 3,869 | 28.1 | 26.1 | - 30.1 |
| Female | 4,887 | 30.5 | 28.7 | - 32.4 |
| Age Group |  |  |  |  |
| 18-24 | 611 | 22.9 | 18.3 | - 27.4 |
| 25-34 | 1,066 | 22.1 | 18.7 | - 25.5 |
| 35-44 | 1,041 | 20.7 | 17.6 | - 23.8 |
| 45-54 | 1,577 | 30.7 | 27.7 | - 33.7 |
| 55-64 | 1,772 | 33.0 | 30.0 | - 36.0 |
| 65-74 | 1,489 | 34.4 | 30.9 | - 38.0 |
| 75 AND OLDER | 1,026 | 53.0 | 48.4 | - 57.6 |
| Race-Ethnicity* |  |  |  |  |
| white | 7,012 | 30.1 | 28.5 | - 31.6 |
| BLACK | 515 | 28.2 | 22.8 | - 33.7 |
| HISPANIC | 700 | 34.6 | 30.0 | - 39.1 |
| ASIAN | 269 | 10.4 | 5.7 | - 15.1 |
| Education |  |  |  |  |
| < HIGH SCHOOL | 613 | 53.2 | 47.5 | - 58.9 |
| High School | 1,981 | 32.6 | 29.8 | - 35.4 |
| COLLEGE 1-3 YRS | 2,056 | 31.8 | 29.1 | - 34.6 |
| COLLEGE 4+ YRS | 4,045 | 18.1 | 16.7 | - 19.5 |
| Household Income |  |  |  |  |
| < \$25,000 | 1,700 | 49.6 | 46.2 | - 53.0 |
| \$25,000-34,999 | 625 | 39.0 | 33.4 | - 44.6 |
| \$35,000-49,999 | 839 | 28.5 | 24.0 | - 33.0 |
| \$50,000-74,999 | 976 | 24.9 | 21.1 | - 28.7 |
| \$75,000+ | 2,850 | 17.0 | 15.1 | - 18.9 |
| * White, Black, and Asian race categories refer to non-Hispanic <br> II See p 61 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 for adults with no health insurance.

| Table 2.1 -Health Insurance Status Among Massachusetts Adults, Ages 18-64, 2015 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | No Health Insurance |  |  |  |
|  | N | \% | 95\% CI |  |
| Overall | 6,096 |  | 2.8 | - 4.1 |
| Gender |  |  |  |  |
| male | 2,822 | 4.8 | 3.7 | - 5.9 |
| female | 3,274 | 2.1 | 1.5 | - 2.8 |
| Age Group |  |  |  |  |
| 18-24 | 587 | 4.3 | 2.4 | - 6.2 |
| 25-34 | 1,000 | 5.1 | 3.3 | - 6.9 |
| 35-44 | 1,062 | 3.8 | 2.1 | - 5.4 |
| 45-54 | 1,612 | 2.9 | 1.8 | - 4.0 |
| 55-64 | 1,835 | 1.6 | 0.9 | - 2.3 |
| Race-Ethnicity* |  |  |  |  |
| white | 4,641 | 2.3 | 1.7 | - 3.0 |
| BLACK | 410 | 7.3 | 3.6 | - 11.0 |
| HISPANIC | 607 | 9.2 | 6.4 | - 12.1 |
| ASIAN | $\dagger$ |  |  |  |
| Disability ${ }^{\text {If }}$ |  |  |  |  |
| disability | 1,669 | 4.2 | 2.8 | - 5.7 |
| No disability | 4,057 | 3.2 | 2.4 | - 3.9 |
| Education |  |  |  |  |
| < HIGH SCHOOL | 395 | 9.5 | 5.8 | - 13.2 |
| HIGH SCHOOL | 1,326 | 4.8 | 3.3 | - 6.3 |
| COLLEGE 1-3 YRS | 1,454 | 3.1 | 2.0 | - 4.2 |
| COLLEGE 4+ YRS | 2,893 | 1.0 | 0.6 | - 1.4 |
| Household Income |  |  |  |  |
| <\$25,000 | 1,114 | 6.7 | 4.8 | - 8.6 |
| \$25,000-34,999 | 331 | 7.7 | 3.5 | - 11.9 |
| \$35,000-49,999 | 513 | 4.9 | 2.7 | - 7.2 |
| \$50,000-74,999 | $\dagger$ |  |  |  |
| \$75,000+ | $\dagger$ |  |  |  |
| * White, Black, and Asian race categories refer to non-Hispanic <br> $\dagger$ Insufficient data |  |  |  |  |

## Section 2.2: Health Care Access

All respondents were asked if they had a person that they thought of as their personal doctor or health care provider. All respondents were also asked whether they were unable to see a doctor at any time in the past year due to cost and about how long since they last visited a doctor for a routine checkup. Presented here are the percentages of adults who reported that 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, 2015 |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Overall | Have Personal Health Care Provider$\mathrm{N} \quad \% \quad 95 \% \mathrm{CI}$ |  |  |  |  | Could Not See Doctor Due to Cost <br> N $\%$ |  |  |  |  |
|  | 9,230 | 88.9 | 88.0 | - | 89.8 | 9,253 | 8.6 | 7.8 | - | 9.4 |
| Gender |  |  |  |  |  |  |  |  |  |  |
| male | 4,106 | 85.1 | 83.6 | - | 86.6 | 4,126 | 8.5 | 7.3 | - | 9.6 |
| FEMALE | 5,124 | 92.4 | 91.4 | - | 93.4 | 5,127 | 8.6 | 7.6 | - | 9.7 |
|  |  |  |  |  |  |  |  |  |  |  |
| 18-24 | 653 | 78.5 | 74.7 | - | 82.2 | 657 | 9.1 | 6.6 | - | 11.6 |
| 25-34 | 1,139 | 76.8 | 73.8 | - | 79.9 | 1,143 | 13.3 | 10.8 | - | 15.8 |
| 35-44 | 1,115 | 86.3 | 83.8 | - | 88.8 | 1,118 | 9.5 | 7.4 | - | 11.7 |
| 45-54 | 1,642 | 93.7 | 92.3 | - | 95.2 | 1,644 | 9.1 | 7.2 | - | 11.0 |
| 55-64 | 1,871 | 95.4 | 94.2 | - | 96.6 | 1,871 | 7.4 | 5.7 | - | 9.0 |
| 65-74 | 1,543 | 98.5 | 97.6 | - | 99.3 | 1,545 | 4.1 | 2.7 | - | 5.6 |
| 75 AND OLDER | 1,063 | 97.7 | 96.3 | - | 99.0 | 1,067 | 3.5 | 1.8 | - | 5.2 |
| Race-ethnicity* |  |  |  |  |  |  |  |  |  |  |
| white | 7,334 | 91.2 | 90.3 | - | 92.1 | 7,351 | 6.4 | 5.6 | - | 7.2 |
| BLACK | 546 | 86.4 | 82.4 | - | 90.3 | 551 | 14.0 | 9.7 | - | 18.4 |
| HISPANIC | 740 | 77.8 | 73.9 | - | 81.7 | 743 | 23.6 | 19.7 | - | 27.5 |
| ASIAN | 288 | 82.0 | 76.8 | - | 87.1 | 288 | 6.2 | 2.9 | - | 9.5 |
|  |  |  |  |  |  |  |  |  |  |  |
| disability | 2,843 | 90.9 | 89.2 | - | 92.6 | 2,846 | 13.8 | 12.0 | - | 15.7 |
| No disability | 5,859 | 88.4 | 87.3 | - | 89.5 | 5,876 | 6.0 | 5.2 | - | 6.9 |
| Education |  |  |  |  |  |  |  |  |  |  |
| < HIGH SCHOOL | 642 | 82.6 | 78.8 | - | 86.4 | 649 | 18.1 | 14.2 | - | 22.0 |
| HIGH SCHOOL | 2,104 | 88.5 | 86.6 | - | 90.3 | 2,105 | 9.7 | 8.0 | - | 11.3 |
| COLLEGE 1-3 YRS | 2,162 | 89.8 | 88.0 | - | 91.6 | 2,164 | 9.0 | 7.4 | - | 10.6 |
| COLLEGE 4+ YRS | 4,253 | 90.6 | 89.5 | - | 91.7 | 4,262 | 4.5 | 3.7 | - | 5.3 |
| Household Income |  |  |  |  |  |  |  |  |  |  |
| < $\$ 25,000$ $\$ 25,000-34,999$ | 1,748 641 |  | 81.2 81.4 | - |  | 1,752 | 16.9 | 14.4 8.0 | - | 19.3 15.4 |
| \$25,000-34,999 | 641 867 | 85.2 89.4 | 81.4 86.4 | - | 89.0 92.3 | 643 869 | 11.7 9.2 | 8.0 6.2 | - | 15.4 12.1 |
| \$50,000-74,999 | 1,002 | 91.3 | 88.7 | - | 93.9 | 1,004 | 7.5 | 5.2 | - | 9.8 |
| \$75,000+ | 2,920 | 92.6 | 91.4 |  | 93.9 | 2,927 | 3.7 | 2.7 | - | 4.6 |
| * White, Black, and Asian race categories refer to non-Hispanic II See p 61 for definition of disability |  |  |  |  |  |  |  |  |  |  |

Table 2.2 (Continued) - Health Care Access Among Massachusetts Adults, 2015

|  | Had a Routine Checkup in the Past Year |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | \% | 95\% CI |  |  |
| Overall | 9,150 | 78.0 | 76.8 | - | 79.2 |
| Gender |  |  |  |  |  |
| male | 4,079 | 73.6 | 71.8 | - | 75.5 |
| female | 5,071 | 82.0 | 80.5 | - | 83.5 |
| Age Group |  |  |  |  |  |
| 18-24 | 645 | 75.7 | 71.4 | - | 79.9 |
| 25-34 | 1,133 | 64.5 | 61.0 | - | 68.0 |
| 35-44 | 1,106 | 70.2 | 66.9 | - | 73.6 |
| 45-54 | 1,633 | 78.7 | 76.2 | - | 81.1 |
| 55-64 | 1,855 | 82.9 | 80.6 | - | 85.2 |
| 65-74 | 1,532 | 91.1 | 89.1 | - | 93.1 |
| 75 AND OLDER | 1,049 | 92.8 | 90.6 | - | 95.0 |
| Race-Ethnicity* |  |  |  |  |  |
| white | 7,276 | 78.2 | 76.8 | - | 79.5 |
| BLACK | 548 | 84.9 | 81.2 | - | 88.6 |
| HISPANIC | 726 | 73.4 | 69.2 | - | 77.5 |
| ASIAN | 285 | 73.4 | 67.5 | - | 79.3 |
| Disability ${ }^{\text {III }}$ |  |  |  |  |  |
| disability | 2,801 | 81.0 | 78.6 | - | 83.4 |
| No disability | 5,828 | 77.1 | 75.7 | - | 78.5 |
| Education |  |  |  |  |  |
| < HIGH SCHOOL | 634 | 75.2 | 70.5 | - | 79.9 |
| HIGH SCHOOL | 2,078 | 79.8 | 77.5 | - | 82.2 |
| COLLEGE 1-3 YRS | 2,148 | 81.0 | 78.6 | - | 83.3 |
| COLLEGE 4+ YRS | 4,222 | 75.4 | 73.7 | - | 77.1 |
| Household income |  |  |  |  |  |
| <\$25,000 | 1,732 | 78.8 | 76.0 | - | 81.6 |
| \$25,000-34,999 | 636 | 80.3 | 75.8 | - | 84.8 |
| \$35,000-49,999 | 860 | 80.1 | 76.5 | - | 83.7 |
| \$50,000-74,999 | 996 | 78.5 | 74.9 | - | 82.0 |
| \$75,000+ | 2,916 | 76.5 | 74.4 | - | 78.5 |

[^0]
## Section 3: Risk Factors and Preventive Behaviors

## Section 3.1: Тоbacco 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.

| Table 3.1.1 - Tobacco Use Among Massachusetts Adults, 2015 |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Overall | Current Smoker |  |  |  |  | FORMER SMOKER |  |  |  |  |
|  | N | \% | 95\% CI |  |  | N | \% |  | 95\% CI |  |
|  | 8,741 | 14.0 | 13.0 | - | 15.0 | 8,741 | 26.9 | 25.6 | - | 28.1 |
| Gender |  |  |  |  |  |  |  |  |  |  |
| male | 3,874 | 16.4 | 14.7 | - | 18.0 | 3,874 | 28.0 | 26.1 | - | 30.0 |
| female | 4,867 | 11.9 | 10.6 | - | 13.1 | 4,867 | 25.8 | 24.2 | - | 27.5 |
| Age Group |  |  |  |  |  |  |  |  |  |  |
| 18-24 | 614 | 12.3 | 8.8 | - | 15.9 | 614 | 6.5 | 3.0 | - | 10.1 |
| 25-34 | 1,069 | 16.9 | 14.0 | - | 19.7 | 1,069 | 16.6 | 13.7 | - | 19.5 |
| 35-44 | 1,043 | 16.5 | 13.6 | - | 19.3 | 1,043 | 21.2 | 18.0 | - | 24.4 |
| 45-54 | 1,563 | 17.6 | 15.1 | - | 20.1 | 1,563 | 26.6 | 23.6 | - | 29.5 |
| 55-64 | 1,772 | 13.3 | 11.2 | - | 15.4 | 1,772 | 33.3 | 30.3 | - | 36.3 |
| 65-74 | 1,481 | 10.0 | 7.8 | - | 12.1 | 1,481 | 48.7 | 45.0 | - | 52.4 |
| 75 AND OLDER | 1,026 | 7.0 | 4.5 | - | 9.6 | 1,026 | 48.2 | 43.6 | - | 52.8 |
| RACE-ETHNICITY* |  |  |  |  |  |  |  |  |  |  |
| white | 7,001 | 14.6 | 13.4 | - | 15.8 | 7,001 | 30.9 | 29.3 | - | 32.4 |
| BLACK | 515 | 15.8 | 11.4 | - | 20.2 | 515 | 16.5 | 12.0 | - | 21.0 |
| HISPANIC | 694 | 11.6 | 8.9 | - | 14.4 | 694 | 16.5 | 13.1 | - | 20.0 |
| ASIAN | 270 | 5.1 | 2.2 | - | 8.0 | 270 | 6.4 | 3.1 | - | 9.8 |
| Disability ${ }^{\text {II }}$ |  |  |  |  |  |  |  |  |  |  |
| disability | 2,813 | 21.7 | 19.4 | - | 24.0 | 2,813 | 31.8 | 29.3 | - | 34.3 |
| No disability | 5,833 | 10.7 | 9.6 | - | 11.8 | 5,833 | 24.8 | 23.3 | - | 26.3 |
| EDUCATION |  |  |  |  |  |  |  |  |  |  |
| < HIGH SCHOOL | 614 | 23.8 | 19.3 | - | 28.3 | 614 | 27.7 | 22.7 | - | 32.6 |
| HIGH SChool | 1,980 | 19.6 | 17.3 | - | 21.9 | 1,980 | 28.5 | 25.9 | - | 31.2 |
| COLLEGE 1-3 YRS | 2,052 | 15.9 | 13.8 | - | 18.1 | 2,052 | 29.0 | 26.3 | - | 31.7 |
| COLLEGE 4+ YRS | 4,031 | 5.7 | 4.8 | - | 6.5 | 4,031 | 23.9 | 22.3 | - | 25.5 |
|  |  |  |  |  |  |  |  |  |  |  |
| <\$25,000 | 1,694 | 23.6 | 20.8 | - | 26.3 | 1,694 | 25.9 | 23.0 | - | 28.8 |
| \$25,000-34,999 | 631 | 15.9 | 12.0 | - | 19.8 | 631 | 30.3 | 25.0 | - | 35.5 |
| \$35,000-49,999 | 840 | 18.6 | 14.9 | - | 22.2 | 840 | 28.0 | 23.5 | - | 32.5 |
| \$50,000-74,999 | 975 | 14.7 | 11.7 | - | 17.7 | 975 | 28.2 | 24.3 | - | 32.1 |
| \$75,000+ | 2,845 | 9.1 | 7.5 | - | 10.8 | 2,845 | 27.0 | 24.9 | - | 29.1 |
| * White, Black, and Asian race categories refer to non-Hispanic II See p 61 for definition of disability |  |  |  |  |  |  |  |  |  |  |

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

Table 3.1.2-Smokeless Tobacco Use Among Massachusetts Addlts, 2015

|  | Use Smokeless tobacco |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | N | \% | 95\% CI |  |
| Overall | 8,780 | 2.6 | 1.9 | - 3.4 |
| GENDER |  |  |  |  |
| MALE | 3,888 | 4.7 | 3.2 | - 6.2 |
| FEMALE | 4,892 | 0.8 | 0.5 | - 1.1 |
| Age Group |  |  |  |  |
| 18-24 | $\dagger$ |  |  |  |
| 25-34 | 1,074 | 3.4 | 2.1 | - 4.7 |
| 35-44 | 1,047 | 2.4 | 1.3 | - 3.6 |
| 45-54 | 1,562 | 2.4 | 1.4 | - 3.4 |
| 55-64 | 1,781 | 1.4 | 0.7 | - 2.2 |
| 65-74 | $\dagger$ |  |  |  |
| 75 AND OLDER | $\dagger$ |  |  |  |
| RACE-ETHNICITY* |  |  |  |  |
| WHITE | 7,030 | 2.7 | 1.8 | - 3.6 |
| BLACK | $\dagger$ |  |  |  |
| HISPANIC | 699 | 2.2 | 1.0 | - 3.5 |
| ASIAN | $\dagger$ |  |  |  |
| DISABILITY ${ }^{\text {If }}$ |  |  |  |  |
| DISABILITY | 2,833 | 3.2 | 2.2 | 4.2 |
| NO DISABILITY | 5,850 | 2.4 | 1.4 | 3.3 |
| Education |  |  |  |  |
| < HIGH SCHOOL | $\dagger$ |  |  |  |
| HIGH SCHOOL | 1,985 | 2.6 | 1.7 | - 3.5 |
| COLLEGE 1-3 YRS | $\dagger$ |  |  |  |
| COLLEGE 4+ YRS | 4,054 | 1.7 | 1.1 | - 2.2 |
| Household Income |  |  |  |  |
| <\$25,000 | 1,700 | 3.0 | 1.8 | - 4.2 |
| \$25,000-34,999 | $\dagger$ |  |  |  |
| \$35,000-49,999 | $\dagger$ |  |  |  |
| \$50,000-74,999 | 978 | 2.1 | 1.0 | - 3.3 |
| \$75,000+ | 2,848 | 2.1 | 1.4 | - 2.9 |

[^1]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, 2015

|  | Current Use of E-Cigarettes |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | N | \% | 95\% CI |  |
| Overall | 7,493 | 2.7 | 2.2 | - 3.2 |
| GENDER |  |  |  |  |
| MALE | 3,270 | 3.5 | 2.6 | - 4.4 |
| FEMALE | 4,223 | 2.0 | 1.4 | - 2.5 |
| AgE Group |  |  |  |  |
| 18-24 | $\dagger$ |  |  |  |
| 25-34 | 800 | 3.1 | 1.9 | - 4.4 |
| 35-44 | 871 | 3.7 | 2.1 | - 5.3 |
| 45-54 | 1,378 | 2.8 | 1.7 | - 3.9 |
| 55-64 | 1,577 | 2.9 | 1.7 | - 4.1 |
| 65-74 | $\dagger$ |  |  |  |
| 75 AND OLDER | $\dagger$ |  |  |  |
| RACE-ETHNICITY* |  |  |  |  |
| WHITE | 6,068 | 3.0 | 2.4 | - 3.7 |
| BLACK | $\dagger$ |  |  |  |
| HISPANIC | $\dagger$ |  |  |  |
| ASIAN | $\dagger$ |  |  |  |
| DISABILITY ${ }^{\text {II }}$ |  |  |  |  |
| DISABILITY | 2,468 | 3.4 | 2.5 | - 4.3 |
| NO DISABILITY | 4,943 | 2.4 |  | - 3.0 |
| EdUCATION |  |  |  |  |
| < HIGH SCHOOL | $\dagger$ |  |  |  |
| HIGH SCHOOL | 1,640 | 2.7 | 1.8 | - 3.7 |
| COLLEGE 1-3 YRS | 1,798 | 3.2 | 2.2 | - 4.2 |
| COLLEGE 4+ YRS | 3,477 | 1.8 | 1.2 | - 2.4 |
| Household Income |  |  |  |  |
| <\$25,000 | 1,441 | 4.1 | 2.8 | - 5.4 |
| \$25,000-34,999 | $\dagger$ |  |  |  |
| \$35,000-49,999 | $\dagger$ |  |  |  |
| \$50,000-74,999 | 847 | 3.2 | 1.7 | - 4.6 |
| \$75,000+ | 2,465 | 3.0 | 1.9 | - 4.1 |

[^2]
## Section 3.2: Smoking Cessation

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

| Table 3.2 - Smoking Cessation Among Massachusetts Adults, 2015 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Quit Attempt |  |  |  |
|  | N | \% |  | \% CI |
|  |  |  |  |  |
| GENDER |  |  |  |  |
| male | 614 | 62.0 | 56.9 | - 67.2 |
| female | 596 | 59.1 | 53.5 | - 64.7 |
| Age Group |  |  |  |  |
| 18-24 | 72 | 78.2 | 67.0 | - 89.3 |
| 25-34 | 170 | 67.0 | 58.4 | - 75.6 |
| 35-44 | 172 | 62.9 | 53.4 | - 72.5 |
| 45-54 | 286 | 52.9 | 45.2 | - 60.5 |
| 55-64 | 266 | 61.5 | 53.5 | - 69.5 |
| 65-74 | 161 | 54.9 | 43.7 | - 66.2 |
| 75 AND OLDER | 65 | 36.7 | 17.8 | - 55.6 |
| Race-Ethnicity* |  |  |  |  |
| white | 968 | 59.0 | 54.7 | - 63.4 |
| BLACK | 77 | 70.0 | 56.6 | - 83.3 |
| HISPANIC | 96 | 70.0 | 58.4 | - 81.7 |
| ASIAN | $\dagger$ |  |  |  |
| Disability ${ }^{\text {II }}$ |  |  |  |  |
| disability | 598 | 65.2 | 59.8 | 70.6 |
| No disability | 596 | 56.5 | 51.2 | 61.8 |
| Education |  |  |  |  |
| < HIGH SCHOOL | 156 | 72.6 | 64.1 | - 81.2 |
| HIGH SCHOOL | 424 | 53.1 | 46.6 | - 59.7 |
| COLLEGE 1-3 YRS | 362 | 64.1 | 57.4 | - 70.7 |
| COLLEGE 4+ YRS | 263 | 57.6 | 49.8 | - 65.3 |
| Household Income |  |  |  |  |
| <\$25,000 | 430 | 63.7 | 57.4 | - 69.9 |
| \$25,000-34,999 | 110 | 50.7 | 37.6 | - 63.9 |
| \$35,000-49,999 | 138 | 60.8 | 50.7 | - 71.0 |
| \$50,000-74,999 | 126 | 66.6 | 56.3 | - 76.9 |
| \$75,000+ | 214 | 62.3 | 53.6 | - 71.0 |
| * White, Black, and Asian race categories refer to non-Hispanic <br> $\dagger$ Insufficient data |  |  |  |  |

## Section 3.3: Environmental Tobacco Smoke

Respondents were asked about exposure to environmental tobacco smoke (ETS) at their home, work, or other places. Among the employed, ETS exposure was defined as any report of exposure to ETS at work, at home, or in other places in the past 7 days. Among those not employed, ETS exposure was defined as any exposure to ETS at home or in other places in the past 7 days.

Table 3.3 - Environmental Tobacco Among Massachusetts Adults, 2015

|  | Exposed to ETS |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | \% | 95\% CI |  |  |
| Overall | 7,343 | 33.2 | 31.6 | - | 34.8 |
| GEnder |  |  |  |  |  |
| MALE | 3,197 | 37.2 | 34.7 | - | 39.7 |
| FEMALE | 4,146 | 29.7 | 27.7 |  | 31.7 |
| Age Group |  |  |  |  |  |
| 18-24 | 457 | 60.5 | 54.6 | - | 66.4 |
| 25-34 | 783 | 48.3 | 43.9 |  | 52.7 |
| 35-44 | 847 | 34.2 | 30.2 |  | 38.3 |
| 45-54 | 1,358 | 29.2 | 26.0 |  | 32.4 |
| 55-64 | 1,564 | 23.4 | 20.5 | - | 26.2 |
| 65-74 | 1,314 | 19.5 | 16.5 |  | 22.5 |
| 75 AND OLDER | 882 | 16.3 | 11.9 |  | 20.6 |
| RACE-ETHNICITY* |  |  |  |  |  |
| WHITE | 5,967 | 32.1 | 30.3 |  | 33.9 |
| BLACK | 420 | 39.0 | 32.5 | - | 45.5 |
| HISPANIC | 569 | 33.1 | 28.3 |  | 38.0 |
| ASIAN | 196 | 42.4 | 34.0 | - | 50.9 |
| DISABILITY ${ }^{\text {II }}$ |  |  |  |  |  |
| DISABILITY | 2,401 | 39.7 | 36.7 |  | 42.7 |
| NO DISABILITY | 4,863 | 30.5 | 28.6 |  | 32.4 |
| Education |  |  |  |  |  |
| < HIGH SCHOOL | 503 | 38.9 | 32.4 | - | 45.4 |
| HIGH SCHOOL | 1,598 | 38.3 | 35.0 |  | 41.7 |
| COLLEGE 1-3 YRS | 1,761 | 38.1 | 34.8 | - | 41.5 |
| COLLEGE 4+ YRS | 3,436 | 24.4 | 22.5 | - | 26.2 |
| Household Income |  |  |  |  |  |
| <\$25,000 | 1,416 | 40.3 | 36.6 | - | 44.0 |
| \$25,000-34,999 | 524 | 35.0 | 29.0 | - | 40.9 |
| \$35,000-49,999 | 709 | 43.5 | 37.3 | - | 49.7 |
| \$50,000-74,999 | 835 | 31.5 | 27.1 | - | 35.9 |
| \$75,000+ | 2,441 | 27.4 | 24.8 | - | 29.9 |

[^3]
## 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, 2015 |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Overall | Binge Drinking |  |  |  |  | Heavy Drinking |  |  |  |  |
|  | N | \% | 95\% CI |  |  | N | \% | 95\% CI |  |  |
|  | 8,474 | 17.7 | 16.5 | - | 18.8 | 8,468 | 7.2 | 6.2 | - | 8.1 |
| Gender |  |  |  |  |  |  |  |  |  |  |
| male | 3,737 | 23.3 | 21.2 | - | 25.3 | 3,743 | 7.2 | 5.7 | - | 8.8 |
| Female | 4,737 | 12.7 | 11.4 | - | 14.0 | 4,725 | 7.1 | 6.1 | - | 8.2 |
| Age Group |  |  |  |  |  |  |  |  |  |  |
| 18-24 | 593 | 30.7 | 25.5 | - | 35.9 | 582 | 12.4 | 7.6 | - | 17.2 |
| 25-34 | 1,028 | 31.4 | 27.9 | - | 34.9 | 1,034 | 9.2 | 6.8 | - | 11.6 |
| 35-44 | 1,008 | 19.7 | 16.7 | - | 22.6 | 1,006 | 7.2 | 5.1 | - | 9.2 |
| 45-54 | 1,516 | 16.1 | 13.8 | - | 18.4 | 1,516 | 5.3 | 3.9 | - | 6.7 |
| 55-64 | 1,732 | 11.1 | 9.1 | - | 13.2 | 1,731 | 6.2 | 4.7 | - | 7.8 |
| 65-74 | 1,440 | 6.1 | 4.3 | - | 7.9 | 1,449 | 6.5 | 4.7 | - | 8.4 |
| 75 AND OLDER | $\dagger$ |  |  |  |  | 989 | 2.6 | 1.2 | - | 4.0 |
| Race-ethnicity* ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |
| white | 6,808 | 19.3 | 17.9 | - | 20.8 | 6,807 | 8.2 | 7.0 | - | 9.3 |
| BLACK | 496 | 13.9 | 9.5 | - | 18.3 | $\dagger$ |  |  |  |  |
| HISPANIC | 671 | 11.7 | 8.8 | - | 14.5 | 666 | 3.8 | 2.0 | - | 5.6 |
| ASIAN | 258 | 12.7 | 7.8 |  | 17.6 | $\dagger$ |  |  |  |  |
| DISABILITY $^{\text {III }}$    |  |  |  |  |  |  |  |  |  |  |
| disability | 2,739 | 14.2 | 12.1 | - | 16.3 | 2,727 | 7.5 | 5.7 | - | 9.4 |
| No disability | 5,641 | 19.0 | 17.5 | - | 20.4 | 5,649 | 7.0 | 6.0 | - | 8.1 |
| Education |  |  |  |  |  |  |  |  |  |  |
| < HIGH SCHOOL | 584 | 13.8 | 8.7 | - | 19.0 | $\dagger$ |  |  |  |  |
| HIGH SCHOOL | 1,891 | 15.1 | 12.8 | - | 17.3 | 1,893 | 6.6 | 5.0 | - | 8.2 |
| College 1-3 YRS | 1,995 | 19.4 | 16.9 | - | 22.0 | 1,987 | 8.3 | 6.3 | - | 10.2 |
| COLLEGE 4+ YRS | 3,946 | 19.4 | 17.8 | - | 21.0 | 3,946 | 6.6 | 5.7 | - | 7.6 |
| Household Income |  |  |  |  |  |  |  |  |  |  |
| <\$25,000 | 1,639 | 14.5 | 12.2 | - | 16.9 | 1,635 | 5.6 | 4.0 | - | 7.1 |
| \$25,000-34,999 | 611 | 13.8 | 9.7 | - | 18.0 | 607 | 5.0 | 2.4 | - | 7.7 |
| \$35,000-49,999 | 823 | 19.3 | 13.9 | - | 24.8 | $\dagger$ |  |  |  |  |
| \$50,000-74,999 | 949 | 19.2 | 15.8 | - | 22.6 | 952 | 8.6 | 5.9 | - | 11.2 |
| \$75,000+ | 2,789 | 22.8 | 20.7 | - | 25.0 | 2,791 | 8.3 | 6.8 | - | 9.8 |
| * White, Black, and Asian race categories refer to non-Hispanic $\dagger$ Insufficient data |  |  |  |  |  |  |  |  |  |  |

## 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, 2015 |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Overall | $\begin{aligned} & \text { OVERWEIGHT AND OBESE (BMI } \geq 25.0) \\ & \mathrm{N} \quad \% \end{aligned}$ |  |  |  |  | OBESE ( $\mathrm{BMI} \geq 30.0$ ) |  |  |  |  |
|  |  |  |  |  |  | N | \% |  | \% |  |
|  | 8,206 | 59.7 | 58.2 | - | 61.2 | 8,206 | 24.3 | 23.0 | - | 25.5 |
| Gender |  |  |  |  |  |  |  |  |  |  |
| male | 3,818 | 69.0 | 66.9 | - | 71.0 | 3,818 | 25.5 | 23.7 | - | 27.3 |
| FEmALE | 4,388 | 50.6 | 48.5 | - | 52.6 | 4,388 | 23.0 | 21.3 | - | 24.8 |
| Age Group |  |  |  |  |  |  |  |  |  |  |
| 18-24 | 575 | 33.2 | 28.0 | - | 38.4 | 575 | 10.6 | 7.7 | - | 13.5 |
| 25-34 | 992 | 55.6 | 51.8 | - | 59.5 | 992 | 21.8 | 18.4 | - | 25.1 |
| 35-44 | 964 | 60.8 | 56.9 | - | 64.7 | 964 | 23.9 | 20.7 | - | 27.2 |
| 45-54 | 1,477 | 67.7 | 64.6 | - | 70.7 | 1,477 | 30.2 | 27.1 | - | 33.3 |
| 55-64 | 1,675 | 71.0 | 68.1 | - | 73.9 | 1,675 | 30.1 | 27.1 | - | 33.2 |
| 65-74 | 1,422 | 65.3 | 61.8 | - | 68.8 | 1,422 | 26.9 | 23.5 | - | 30.4 |
| 75 AND OLDER | 1,003 | 58.9 | 54.3 | - | 63.5 | 1,003 | 22.9 | 18.7 | - | 27.1 |
| Race-ethnicity* |  |  |  |  |  |  |  |  |  |  |
| white | 6,616 | 59.4 | 57.7 | - | 61.0 | 6,616 | 23.5 | 22.1 | - | 24.9 |
| BLACK | 477 | 72.1 | 66.5 | - | 77.6 | 477 | 37.5 | 31.3 | - | 43.6 |
| HISPANIC | 644 | 69.3 | 64.7 | - | 74.0 | 644 | 33.4 | 28.7 | - | 38.0 |
| ASIAN | 239 | 37.1 | 29.8 | - | 44.4 | 239 | 7.3 | 3.5 | - | 11.1 |
| DISABILITY ${ }^{\text {II }}$ |  |  |  |  |  |  |  |  |  |  |
| disability | 2,638 | 66.9 | 64.1 | - | 69.7 | 2,638 | 34.4 | 31.7 | - | 37.1 |
| No disability | 5,338 | 56.5 | 54.7 | - | 58.3 | 5,338 | 20.0 | 18.6 | - | 21.5 |
| Education |  |  |  |  |  |  |  |  |  |  |
| < HIGH SCHOOL | 563 | 68.3 | 62.7 | - | 73.9 | 563 | 34.8 | 29.4 | - | 40.3 |
| HIGH SCHOOL | 1,878 | 63.0 | 59.9 | - | 66.0 | 1,878 | 27.5 | 24.8 | - | 30.2 |
| COLLEGE 1-3 YRS | 1,924 | 60.8 | 57.7 | - | 63.8 | 1,924 | 26.5 | 23.9 | - | 29.2 |
| COLLEGE 4+ YRS | 3,807 | 54.1 | 52.1 | - | 56.1 | 3,807 | 17.3 | 15.8 | - | 18.7 |
| Household Income |  |  |  |  |  |  |  |  |  |  |
| <\$25,000 | 1,631 | 62.8 | 59.4 | - | 66.2 | 1,631 | 30.6 | 27.5 | - | 33.8 |
| \$25,000-34,999 | 605 | 63.7 | 58.3 | - | 69.1 | 605 | 28.7 | 23.6 | - | 33.9 |
| \$35,000-49,999 | 813 | 64.4 | 59.5 | - | 69.3 | 813 | 27.4 | 22.8 | - | 32.1 |
| \$50,000-74,999 | 925 | 61.4 | 57.2 | - | 65.7 | 925 | 26.8 | 22.8 | - | 30.8 |
| \$75,000+ | 2,742 | 58.1 | 55.7 | - | 60.6 | 2,742 | 19.3 | 17.4 | - | 21.2 |
| * White, Black, and Asian race categories refer to non-Hispanic <br> II See p 61 for definition of disability |  |  |  |  |  |  |  |  |  |  |

## Section 3.6: Physical Activity

In 2015, all respondents who reported ANY leisure-time physical activity were asked what two types of physical activity gave them the most exercise in the past month. They were also asked how frequently and for how long they took part in these activities. All respondents were also asked how frequently they took part in activities or exercises to strengthen muscles.

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

| Table 3.6 - Physical Activity Among Massachusetts Adults, 2015 |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Overall | Met Aerobic Activity guideline$\mathrm{N} \quad \% \quad 95 \% \mathrm{CI}$ |  |  |  |  | Met Muscle Strengthening Guideline$\mathrm{N} \quad \% \quad 95 \% \mathrm{CI}$ |  |  |  |  |
|  | 7,694 | 51.8 | 50.2 | - | 53.4 | 7,925 | 31.5 | 30.1 | - | 33.0 |
| Gender |  |  |  |  |  |  |  |  |  |  |
| male | 3,395 | 54.3 | 51.9 |  | 56.6 | 3,499 | 34.0 | 31.7 | - | 36.3 |
| female | 4,299 | 49.6 | 47.5 | - | 51.7 | 4,426 | 29.3 | 27.5 | - | 31.2 |
| Age Group |  |  |  |  |  |  |  |  |  |  |
| 18-24 | 520 | 53.8 | 47.8 |  | 59.7 | 528 | 49.3 | 43.5 | - | 55.2 |
| 25-34 | 927 | 52.2 | 48.2 |  | 56.2 | 946 | 34.4 | 30.6 | - | 38.1 |
| 35-44 | 924 | 50.9 | 46.9 |  | 54.9 | 940 | 30.0 | 26.3 | - | 33.6 |
| 45-54 | 1,419 | 51.2 | 47.8 |  | 54.6 | 1,425 | 29.7 | 26.7 | - | 32.7 |
| 55-64 | 1,611 | 52.1 | 48.7 | - | 55.5 | 1,630 | 26.5 | 23.6 | - | 29.5 |
| 65-74 | 1,350 | 53.1 | 49.2 | - | 56.9 | 1,375 | 27.4 | 24.2 | - | 30.6 |
| 75 AND OLDER | 904 | 51.0 | 46.1 | - | 55.9 | 926 | 23.1 | 19.1 | - | 27.2 |
| Race-Ethnicity* |  |  |  |  |  |  |  |  |  |  |
| white | 6,228 | 54.6 | 52.8 | - | 56.3 | 6,388 | 32.3 | 30.7 | - | 34.0 |
| BLACK | 443 | 42.1 | 35.7 | - | 48.5 | 452 | 31.2 | 25.4 | - | 37.0 |
| HISPANIC | 610 | 39.5 | 34.5 |  | 44.6 | 631 | 23.4 | 19.0 | - | 27.7 |
|  | 223 | 44.0 | 36.2 | - | 51.8 | 237 | 36.0 | 28.5 | - | 43.5 |
| DISABILITY $^{\text {II }}$        |  |  |  |  |  |  |  |  |  |  |
| disability | 2,492 | 42.3 | 39.4 | - | 45.2 | 2,560 | 25.7 | 23.1 | - | 28.2 |
| No disability | 5,120 | 55.8 | 54.0 | - | 57.7 | 5,277 | 34.1 | 32.3 | - | 35.8 |
| EdUCATION    |  |  |  |  |  |  |  |  |  |  |
| < HIGH SCHOOL | 533 | 34.2 | 28.4 | - | 40.1 | 557 | 20.0 | 14.1 | - | 25.8 |
| HIGH SCHOOL | 1,657 | 47.6 | 44.3 |  | 50.9 | 1,710 | 25.5 | 22.6 | - | 28.4 |
| COLLEGE 1-3 YRS | 1,829 | 50.8 | 47.6 |  | 54.0 | 1,874 | 33.8 | 30.7 | - | 36.9 |
| COLLEGE 4+ YRS | 3,635 | 60.7 | 58.7 | - | 62.7 | 3,730 | 37.2 | 35.3 | - | 39.2 |
| Household Income |  |  |  |  |  |  |  |  |  |  |
| <\$25,000 | 1,488 | 42.4 | 38.8 | - | 46.0 | 1,517 | 23.9 | 20.8 | - | 27.0 |
| \$25,000-34,999 | 553 | 39.2 | 33.5 | - | 45.0 | 567 | 25.7 | 20.5 | - | 30.8 |
| \$35,000-49,999 | 751 | 48.5 | 42.8 | - | 54.2 | 765 | 31.0 | 25.2 | - | 36.8 |
| \$50,000-74,999 | 870 | 53.1 | 48.6 | - | 57.6 | 883 | 32.5 | 28.3 | - | 36.7 |
| \$75,000+ | 2,606 | 61.2 | 58.8 | - | 63.7 | 2,643 | 38.6 | 36.2 | - | 41.0 |

[^4]
## Section 3.7: Fruit and Vegetable Consumption

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


## Section 3.8 Cholesterol Awareness

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

| Table 3.8-Cholesterol Awareness Among Massachusetts Adults, 2015 |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Overall | Cholesterol Checked in Past 5 Years$\mathrm{N}, \%, \quad 95 \% \mathrm{CI}$ |  |  |  |  | High Cholesterol** |  |  |  |  |
|  |  |  |  |  |  | N | \% | 95\% CI |  |  |
|  | 8,851 | 83.7 | 82.5 | - | 84.8 | 8,078 | 34.5 | 33.1 | - | 35.9 |
| Gender |  |  |  |  |  |  |  |  |  |  |
| male | 3,959 | 81.7 | 79.8 | - | 83.5 | 3,539 | 38.1 | 36.0 | - | 40.3 |
| female | 4,892 | 85.5 | 84.1 | - | 87.0 | 4,539 | 31.3 | 29.4 | - | 33.1 |
| Age Group |  |  |  |  |  |  |  |  |  |  |
| 18-24 | 581 | 52.0 | 46.5 | - | 57.6 | 319 | 10.7 | 5.6 | - | 15.8 |
| 25-34 | 1,061 | 70.3 | 66.8 | - | 73.8 | 826 | 14.4 | 11.5 | - | 17.2 |
| 35-44 | 1,078 | 83.4 | 80.6 | - | 86.2 | 964 | 21.6 | 18.4 | - | 24.9 |
| 45-54 | 1,607 | 91.0 | 89.1 | - | 92.8 | 1,528 | 33.7 | 30.6 | - | 36.8 |
| 55-64 | 1,820 | 95.1 | 93.8 | - | 96.5 | 1,788 | 48.2 | 45.0 | - | 51.3 |
| 65-74 | 1,506 | 96.6 | 95.4 | - | 97.8 | 1,477 | 53.8 | 50.2 | - | 57.5 |
| 75 and OLDER | 1,005 | 97.2 | 95.9 | - | 98.5 | 993 | 53.8 | 49.1 | - | 58.5 |
| Race-Ethnicity* |  |  |  |  |  |  |  |  |  |  |
| white | 7,034 | 86.3 | 85.0 | - | 87.6 | 6,567 | 35.9 | 34.4 | - | 37.5 |
| BLACK | 524 | 82.3 | 78.0 | - | 86.6 | 458 | 32.3 | 26.0 | - | 38.5 |
| HISPANIC | 713 | 70.6 | 66.3 | - | 74.9 | 565 | 32.6 | 27.8 | - | 37.5 |
| ASIAN | 276 | 71.7 | 65.6 | - | 77.8 | 204 | 24.1 | 17.2 | - | 31.0 |
| Disability ${ }^{\text {II }}$ |  |  |  |  |  |  |  |  |  |  |
| disability | 2,706 | 86.5 | 84.4 | - | 88.6 | 2,545 | 45.3 | 42.5 | - | 48.2 |
| no disability | 5,644 | 83.0 | 81.6 | - | 84.5 | 5,105 | 30.6 | 28.9 | - | 32.2 |
| Education |  |  |  |  |  |  |  |  |  |  |
| < HIGH SCHOOL | 619 | 73.0 | 67.9 | - | 78.1 | 512 | 43.2 | 37.0 | - | 49.3 |
| High School | 1,982 | 80.7 | 78.3 | - | 83.2 | 1,771 | 38.1 | 35.0 | - | 41.1 |
| COLLEGE 1-3 YRS | 2,075 | 85.0 | 82.6 | - | 87.3 | 1,901 | 34.2 | 31.3 | - | 37.0 |
| COLLEGE 4+ YRS | 4,110 | 88.1 | 86.8 | - | 89.3 | 3,834 | 30.2 | 28.3 | - | 32.0 |
| Household Income |  |  |  |  |  |  |  |  |  |  |
| <\$25,000 | 1,682 | 79.8 | 77.1 | - | 82.6 | 1,481 | 41.8 | 38.2 | - | 45.4 |
| \$25,000-34,999 | 615 | 84.2 | 80.1 | - | 88.3 | 562 | 40.0 | 34.1 | - | 45.9 |
| \$35,000-49,999 | 839 | 83.5 | 79.8 | - | 87.2 | 749 | 35.4 | 30.3 | - | 40.6 |
| \$50,000-74,999 | 976 | 86.3 | 83.0 | - | 89.7 | 907 | 35.1 | 31.0 | - | 39.3 |
| \$75,000+ | 2,837 | 88.4 | 86.7 | - | 90.1 | 2,680 | 31.7 | 29.4 | - | 34.0 |
| * White, Black, and Asian race categories refer to non-Hispanic |  |  |  |  |  |  |  |  |  |  |
| II See p 61 for definition of disability <br> ** Analysis conducted among those who reported having their cholesterol checked. |  |  |  |  |  |  |  |  |  |  |

## Section 3.9: Hypertension Awareness

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

| Table 3.9-Hypertension Awareness Among Massachusetts Adults, 2015 |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | High Blood Pressure |  |  |  |  | Take Medicine for High Blood Pressure** |  |  |  |  |
|  | N | \% | 95\% CI |  |  | N | \% |  | 95\% CI |  |
| Overall | 9,263 | 29.6 | 28.4 | - | 30.9 | 3,228 | 78.9 | 76.8 | - | 81.1 |
| Gender |  |  |  |  |  |  |  |  |  |  |
| male | 4,127 | 32.7 | 30.8 | - | 34.6 | 1,517 | 74.6 | 71.4 | - | 77.8 |
| female | 5,136 | 26.8 | 25.2 | - | 28.4 | 1,711 | 83.8 | 81.1 | - | 86.4 |
| Age Group |  |  |  |  |  |  |  |  |  |  |
| 18-24 | 659 | 5.3 | 3.2 | - | 7.4 |  |  |  | - |  |
| 25-34 | 1,145 | 11.9 | 9.3 | - | 14.5 | 120 | 25.5 | 15.8 | - | 35.3 |
| 35-44 | 1,116 | 16.9 | 14.2 | - | 19.6 | 187 | 57.0 | 48.5 | - | 65.5 |
| 45-54 | 1,651 | 29.5 | 26.5 | - | 32.4 | 489 | 75.5 | 70.4 | - | 80.7 |
| 55-64 | 1,874 | 40.5 | 37.4 | - | 43.5 | 786 | 84.5 | 80.9 | - | 88.0 |
| 65-74 | 1,545 | 57.2 | 53.8 | - | 60.7 | 851 | 92.0 | 89.4 | - | 94.6 |
| 75 AND OLDER | 1,067 | 65.9 | 61.6 | - | 70.2 | 693 | 96.1 | 94.1 | - | 98.2 |
| Race-Ethnicity* |  |  |  |  |  |  |  |  |  |  |
| white | 7,350 | 30.7 | 29.3 | - | 32.1 | 2,614 | 80.0 | 77.7 | - | 82.3 |
| BLACK | 554 | 39.4 | 33.7 | - | 45.1 | 241 | 82.0 | 75.7 | - | 88.4 |
| HISPANIC | 745 | 24.9 | 21.1 | - | 28.7 | 221 | 72.9 | 65.3 | - | 80.4 |
| ASIAN | 289 | 15.1 | 10.1 | - | 20.1 |  |  |  | - |  |
| DISABILITY ${ }^{\text {II }}$ |  |  |  |  |  |  |  |  |  |  |
| disability | 2,849 | 45.0 | 42.3 | - | 47.7 | 1,409 | 78.4 | 74.8 | - | 82.0 |
| No disability | 5,877 | 24.0 | 22.6 | - | 25.4 | 1,671 | 79.3 | 76.6 | - | 82.0 |
| Education |  |  |  |  |  |  |  |  |  |  |
| < HIGH SCHOOL | 649 | 37.3 | 32.2 | - | 42.4 | 294 | 79.5 | 72.7 | - | 86.4 |
| HIGH SCHOOL | 2,112 | 34.7 | 32.0 | - | 37.3 | 899 | 80.4 | 76.5 | - | 84.2 |
| COLLEGE 1-3 YRS | 2,166 | 30.3 | 27.7 | - | 32.9 | 797 | 78.6 | 74.2 | - | 82.9 |
| COLLEGE 4+ YRS | 4,264 | 23.1 | 21.6 | - | 24.6 | 1,212 | 77.9 | 74.7 | - | 81.1 |
| Household Income |  |  |  |  |  |  |  |  |  |  |
| $<\$ 25,000$ | 1,762 | 36.3 | 33.2 | - | 39.4 | 784 | 78.3 | 74.0 | - | 82.7 |
| \$25,000-34,999 | 646 | 42.3 | 36.8 | - | 47.8 | 288 | 80.4 | 72.4 | - | 88.4 |
| \$35,000-49,999 | 870 | 33.3 | 28.8 | - | 37.9 | 335 | 83.2 | 77.7 | - | 88.7 |
| \$50,000-74,999 | 1,003 | 32.8 | 28.9 | - | 36.7 | 359 | 77.9 | 71.9 | - | 84.0 |
| \$75,000+ | 2,927 | 22.7 | 20.7 | - | 24.6 | 761 | 75.9 | 71.4 | - | 80.3 |
| * White, Black, and Asian race categories refer to non-Hispanic |  |  |  |  |  |  |  |  |  |  |
| II See p 61 for definition of disability <br> ** Analysis conducted among those who reported having high blood pressure |  |  |  |  |  |  |  |  |  |  |

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 percentage of adults ages 18-49 years, 50-64 years and ages 65 and older that 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, 2015 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Overall | Flu vaccine in past year, Ages 18-49$\mathrm{N} \quad \% \quad 95 \% \mathrm{CI}$ |  |  |  | FLU VACCINE IN PAST YEAR, AGES 50-64$\mathrm{N}, \% \quad 95 \% \mathrm{CI}$ |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | 3,018 | 36.1 | 33.9 | - 38.3 | 2,450 | 46.5 | 43.8 | - | 49.1 |
| Gender |  |  |  |  |  |  |  |  |  |
| male | 1,408 | 29.0 | 26.0 | - 32.0 | 1,122 | 42.0 | 38.3 | - | 45.8 |
| female | 1,610 | 42.7 | 39.7 | - 45.8 | 1,328 | 50.7 | 46.9 | - | 54.4 |
| Age Group |  |  |  |  |  |  |  |  |  |
| 18-24 | 526 | 31.5 | 26.4 | - 36.5 |  |  |  |  |  |
| 25-34 | 943 | 34.2 | 30.5 | - 37.9 |  |  |  |  |  |
| 35-44 | 933 | 41.1 | 37.2 | - 45.0 |  |  |  |  |  |
| 45-49 | 616 | 37.9 | 32.9 | - 42.9 |  |  |  |  |  |
| 50-64 |  |  |  |  | 2,450 | 46.5 | 43.8 | - | 49.1 |
| Race-Ethnicity* |  |  |  |  |  |  |  |  |  |
| white | 2,142 | 36.2 | 33.6 | - 38.9 | 2,091 | 47.3 | 44.4 | - | 50.2 |
| BLACK | 216 | 29.9 | 22.0 | - 37.8 | 127 | 42.0 | 29.3 | - | 54.6 |
| HISPANIC | 400 | 36.1 | 30.2 | - 41.9 | 141 | 42.4 | 31.8 | - | 53.0 |
| ASIAN | 184 | 37.1 | 28.8 | - 45.4 | $\dagger$ |  |  |  |  |
| Disability ${ }^{\text {II }}$ |  |  |  |  |  |  |  |  |  |
| disability | 669 | 32.6 | 28.1 | - 37.2 | 883 | 47.1 | 42.5 | - | 51.8 |
| no disability | 2,316 | 37.2 | 34.7 | - 39.7 | 1,548 | 46.4 | 43.1 | - | 49.6 |
| Education |  |  |  |  |  |  |  |  |  |
| < HIGH SCHOOL | 194 | 30.2 | 22.3 | - 38.0 | 156 | 43.1 | 33.0 | - | 53.2 |
| HIGH SCHOOL | 569 | 29.8 | 25.2 | - 34.4 | 540 | 42.5 | 36.7 | - | 48.3 |
| COLLEGE 1-3 YRS | 700 | 30.5 | 26.2 | - 34.9 | 590 | 42.0 | 36.6 | - | 47.3 |
| COLLEGE 4+ YRS | 1,542 | 45.9 | 42.9 | - 48.9 | 1,157 | 53.2 | 49.6 | - | 56.8 |
| Household Income |  |  |  |  |  |  |  |  |  |
| <\$25,000 | 526 | 36.4 | 31.4 | - 41.5 | 463 | 35.3 | 29.3 | - | 41.4 |
| \$25,000-34,999 | 175 | 24.2 | 16.3 | - 32.1 | 135 | 43.6 | 31.2 | - | 55.9 |
| \$35,000-49,999 | 264 | 31.9 | 23.8 | - 40.0 | 217 | 39.2 | 29.7 | - | 48.6 |
| \$50,000-74,999 | 317 | 35.2 | 28.6 | - 41.8 | 309 | 52.2 | 44.7 | - | 59.8 |
| \$75,000+ | 1,206 | 40.8 | 37.3 | 44.3 | 951 | 51.1 | 47.1 | - | 55.2 |
| * White, Black, and Asian race categories refer to non-Hispanic <br> $\dagger$ Insufficient data |  |  |  |  |  |  |  |  |  |
| Il See p 61 for definition of | ability |  |  |  |  |  |  |  |  |

## Table 4.1.2 - Flu Vaccine Among Massachusetts Adults, Ages 65 Years and Older, 2015

|  | Flu vaccine in past year, Ages 65+ |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | N | \% | 95\% CI |  |
| Overall | 2,321 | 61.0 | 58.1 | - 64.0 |
| GENDER |  |  |  |  |
| MALE | 905 | 62.5 | 58.0 | - 67.0 |
| FEMALE | 1,416 | 59.9 | 56.0 | - 63.8 |
| Age Group |  |  |  |  |
| 65-74 | 1,385 | 58.7 | 55.0 | - 62.5 |
| 75 AND OLDER | 936 | 64.0 | 59.3 | - 68.7 |
| RACE-ETHNICITY* |  |  |  |  |
| WHITE | 2,072 | 62.0 | 58.9 | - 65.1 |
| BLACK | 98 | 48.7 | 33.8 | - 63.6 |
| HISPANIC | 87 | 62.9 | 46.3 | - 79.4 |
| ASIAN | $\dagger$ |  |  |  |
| DISABILITY ${ }^{\text {IT }}$ |  |  |  |  |
| DISABILITY | 994 | 61.8 | 57.0 | - 66.5 |
| NO DISABILITY | 1,300 | 60.6 | 56.9 | - 64.3 |
| Education |  |  |  |  |
| < HIGH SCHOOL | 200 | 55.1 | 44.4 | - 65.8 |
| HIGH SCHOOL | 586 | 58.9 | 53.0 | - 64.7 |
| COLLEGE 1-3 YRS | 563 | 58.8 | 53.3 | - 64.4 |
| COLLEGE 4+ YRS | 958 | 67.7 | 63.9 | - 71.6 |
| Household Income |  |  |  |  |
| <\$25,000 | 525 | 57.5 | 50.9 | - 64.0 |
| \$25,000-34,999 | 252 | 57.0 | 47.1 | - 66.8 |
| \$35,000-49,999 | 283 | 58.5 | 49.7 | - 67.3 |
| \$50,000-74,999 | 254 | 62.5 | 54.1 | - 71.0 |
| \$75,000+ | 460 | 67.6 | 62.2 | - 73.1 |
| * White, Black, and Asian race categories refer to non-Hispanic $\dagger$ Insufficient data |  |  |  |  |
| II See p 61 for definition |  |  |  |  |


| Table 4.1.3-Pneumonia Vaccine Among Massachusetts Addlts, Ages 65 <br> Years and Older, 2015 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Ever had Pneumonia Vaccine |  |  |  |  |
|  | N | \% | 95\% CI |  |  |
| Overall | 2,206 | 73.2 | 70.4 | - | 76.0 |
| Gender |  |  |  |  |  |
| male | 848 | 68.8 | 64.2 | - | 73.5 |
| FEMALE | 1,358 | 76.4 | 73.0 |  | 79.8 |
| AGE Group |  |  |  |  |  |
| 65-74 | 1,313 | 66.1 | 62.3 | - | 69.9 |
| 75 AND OLDER | 893 | 82.4 | 78.5 | - | 86.2 |
| Race-ethnicity* |  |  |  |  |  |
| white | 1,977 | 75.0 | 72.1 | - | 77.9 |
| BLACK | 91 | 57.8 | 42.5 | - | 73.1 |
| Hispanic | 75 | 63.6 | 46.9 | - | 80.3 |
| ASIAN | $\dagger$ |  |  |  |  |
| Disability ${ }^{\text {II }}$ |  |  |  |  |  |
| disability | 944 | 77.5 | 73.2 | - | 81.9 |
| No disability | 1,237 | 70.3 | 66.7 | - | 73.9 |
| Education |  |  |  |  |  |
| < HIGH SCHOOL | 187 | 66.8 | 56.3 | - | 77.4 |
| HIGH SCHOOL | 563 | 73.5 | 68.1 | - | 78.9 |
| COLLEGE 1-3 YRS | 545 | 73.5 | 68.4 | - | 78.6 |
| COLLEGE 4+ YRS | 897 | 75.3 | 71.5 | - | 79.2 |
| Household Income |  |  |  |  |  |
| < 25 ,000 | 503 | 75.1 | 69.5 | - | 80.7 |
| \$25,000-34,999 | 241 | 69.6 | 59.5 | - | 79.7 |
| \$35,000-49,999 | 268 | 78.9 | 71.6 | - | 86.2 |
| \$50,000-74,999 | 237 | 71.6 | 63.2 | - | 80.0 |
| \$75,000+ | 436 | 75.3 | 70.2 | - | 80.4 |
| * White, Black, and Asian race categories refer to non-Hispanic <br> $\dagger$ Insufficient data <br> II See p 61 for definition of disability |  |  |  |  |  |

## Section 4.2: Human Papilloma Virus (HPV) V accination

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

Table 4.2-HPV Vaccine Among Massachusetts Females, Ages 18-34 Years, 2015

| Overall | EVER HAD HPV Vaccine |  |  |  |  | Completed Series ** |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | \% | 95\% CI |  |  | N | \% | 95\% CI |  |  |
|  | 620 | 56.1 | 51.2 | - | 60.9 | 320 | 77.9 | 72.4 | - | 83.5 |
| Age Group |  |  |  |  |  |  |  |  |  |  |
| 18-24 | 209 | 76.6 | 70.1 | - | 83.2 | 143 | 80.3 | 72.8 | - | 87.7 |
| 25-34 | 411 | 40.6 | 34.8 | - | 46.5 | 177 | 74.8 | 66.7 | - | 82.8 |
| RACE-ETHNICITY* |  |  |  |  |  |  |  |  |  |  |
| WHITE | 423 | 63.6 | 57.7 | - | 69.4 | 251 | 83.9 | 78.6 | - | 89.2 |
| BLACK | 51 | 53.8 | 36.6 | - | 71.0 | $\dagger$ |  |  |  |  |
| HISPANIC | 87 | 31.4 | 20.0 | - | 42.7 | $\dagger$ |  |  |  |  |
| ASIAN | $\dagger$ |  |  |  |  | $\dagger$ |  |  |  |  |
| DISABILITY ${ }^{\text {If }}$ |  |  |  |  |  |  |  |  |  |  |
| DISABILITY | 116 | 67.8 | 57.6 | - | 78.1 | 68 | 78.5 | 66.4 | - | 90.6 |
| NO DISABILITY | 496 | 53.1 | 47.6 | - | 58.5 | 249 | 77.8 | 71.6 | - | 84.0 |
| Education |  |  |  |  |  |  |  |  |  |  |
| < HIGH SCHOOL | $\dagger$ |  |  |  |  | $\dagger$ |  |  |  |  |
| HIGH SCHOOL | 112 | 51.6 | 40.3 | - | 62.9 | $\dagger$ |  |  |  |  |
| COLLEGE 1-3 YRS | 157 | 65.7 | 57.0 | - | 74.5 | 91 | 73.4 | 63.1 | - | 83.8 |
| COLLEGE 4+ YRS | 310 | 57.1 | 50.6 | - | 63.6 | 171 | 85.4 | 79.3 | - | 91.5 |
| Household Income |  |  |  |  |  |  |  |  |  |  |
| < 25,000 | 145 | 49.0 | 39.1 | - | 58.9 | 68 | 66.3 | 52.9 | - | 79.7 |
| \$25,000-34,999 | $\dagger$ |  |  |  |  | $\dagger$ |  |  |  |  |
| \$35,000-49,999 | 54 | 42.0 | 26.0 | - | 58.0 | $\dagger$ |  |  |  |  |
| \$50,000-74,999 | 71 | 72.4 | 60.0 | - | 84.9 | $\dagger$ |  |  |  |  |
| \$75,000+ | 174 | 63.2 | 54.0 | - | 72.3 | 103 | 85.3 | 77.7 | - | 92.9 |

[^5]
## 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, 2015 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Received 3 shots HBV Vaccine |  |  |  |
|  | N | \% |  | CI |
| Overall | 4,288 | 38.4 | 35.6 | 41.3 |
| Gender |  |  |  |  |
| male | 1,878 | 33.4 | 29.2 | 37.5 |
| Female | 2,410 | 42.9 | 39.1 | 46.6 |
| Age Group |  |  |  |  |
| 18-24 | 241 | 66.6 | 58.5 | 74.7 |
| 25-34 | 408 | 58.4 | 50.2 | 66.6 |
| 35-44 | 467 | 50.7 | 42.6 | 58.8 |
| 45-54 | 777 | 37.5 | 30.5 | 44.5 |
| 55-64 | 975 | 24.5 | 19.4 | 29.6 |
| 65-74 | 811 | 19.6 | 15.1 | 24.1 |
| 75 AND OLDER | 528 | 5.6 | 2.9 | 8.3 |
| RACE-ETHNICITY* ${ }^{\text {* }}$ ( ${ }^{\text {a }}$ |  |  |  |  |
| white | 3,496 | 35.7 | 32.6 | 38.8 |
| BLACK | 241 | 39.0 | 29.1 | 49.0 |
| HISPANIC | 321 | 44.1 | 34.4 | 53.9 |
| ASIAN | 108 | 73.3 | 63.2 | 83.5 |
| Disability ${ }^{\text {II }}$ |  |  |  |  |
| disability | 1,417 | 33.9 | 29.0 | 38.7 |
| No disability | 2,824 | 40.5 | 37.1 | 44.0 |
| Education |  |  |  |  |
| < HIGH SCHOOL | 294 | 26.4 | 18.3 | 34.4 |
| HIGH SCHOOL | 968 | 27.8 | 22.5 | 33.1 |
| COLLEGE 1-3 YRS | 1,045 | 43.1 | 37.3 | 48.8 |
| COLLEGE 4+ YRS | 1,951 | 46.4 | 42.1 | 50.6 |
| Household Income |  |  |  |  |
| < $\$ 25,000$ | 844 | 34.0 | 28.0 | 39.9 |
| \$25,000-34,999 | 332 | 23.0 | 15.7 | 30.2 |
| \$35,000-49,999 | 421 | 29.8 | 22.3 | 37.3 |
| \$50,000-74,999 | 483 | 36.1 | 28.2 | 44.0 |
| \$75,000+ | 1,371 | 50.1 | 44.9 | 55.3 |
| * White, Black, and Asian race categories refer to non-Hispanic <br> II See p 61 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+, 2015

|  | Ever Had Shingles Vaccine |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | N | \% | 95\% CI |  |
| Overall | 2,106 | 43.7 | 39.9 | - 47.6 |
| GEnder |  |  |  |  |
| MALE | 846 | 46.6 | 40.4 | - 52.9 |
| FEMALE | 1,260 | 41.6 | 36.8 | - 46.4 |
| Age Group |  |  |  |  |
| 60-69 | 1,107 | 39.1 | 33.6 | - 44.6 |
| 70-79 | 670 | 50.8 | 44.2 | - 57.5 |
| 80 AND OLDER | 329 | 45.1 | 36.0 | - 54.1 |
| Race-ETHNICITY* |  |  |  |  |
| WHITE | 1,859 | 46.9 | 42.8 | - 51.0 |
| BLACK | 97 | 21.8 | 9.4 | - 34.3 |
| HISPANIC | $\dagger$ |  |  |  |
| ASIAN | $\dagger$ |  |  |  |
| DISABILITY ${ }^{\text {II }}$ |  |  |  |  |
| DISABILITY | 897 | 39.8 | 34.0 | - 45.7 |
| NO DISABILITY | 1,185 | 46.7 | 41.6 | - 51.9 |
| EdUCATION |  |  |  |  |
| < HIGH SCHOOL | 158 | 28.0 | 16.0 | - 40.0 |
| HIGH SCHOOL | 503 | 40.4 | 32.5 | - 48.4 |
| COLLEGE 1-3 YRS | 530 | 37.5 | 30.4 | - 44.6 |
| COLLEGE 4+ YRS | 903 | 58.1 | 52.3 | - 63.9 |
| Household Income |  |  |  |  |
| <\$25,000 | 448 | 36.9 | 28.7 | - 45.1 |
| \$25,000-34,999 | 229 | 43.6 | 30.8 | - 56.5 |
| \$35,000-49,999 | 253 | 40.3 | 29.2 | - 51.3 |
| \$50,000-74,999 | 250 | 43.5 | 33.0 | - 54.0 |
| \$75,000+ | 471 | 58.0 | 49.7 | - 66.3 |

[^6]
## Section 5: Chronic Health Conditions

## Section 5.1: Diabetes

All respondents were asked if a doctor had ever told them that they had 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 health care provider had ever told them that they had diabetes.


## 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 Addlts, 2015 |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Overall | Ever Had Asthma |  |  |  |  | Currently have Asthma |  |  |  |  |
|  | N | \% | 95\% CI |  |  | N | \% | 95\% CI |  |  |
|  | 9,250 | 15.5 | 14.5 | - | 16.5 |  | 10.2 | 9.3 | - | 11.0 |
| Gender |  |  |  |  |  |  |  |  |  |  |
| male | 4,130 | 13.1 | 11.7 | - | 14.5 | 4106 | 7.3 | 6.3 | - | 8.4 |
| female | 5,120 | 17.7 | 16.2 |  | 19.2 | 5099 | 12.8 | 11.5 | - | 14.1 |
| Age Group |  |  |  |  |  |  |  |  |  |  |
| 18-24 | 658 | 20.9 | 16.9 | - | 24.9 | 654 | 13.4 | 9.9 | - | 16.8 |
| 25-34 | 1,145 | 17.3 | 14.7 | - | 19.9 | 1138 | 9.9 | 7.9 | - | 11.9 |
| 35-44 | 1,117 | 14.8 | 12.2 | - | 17.3 | 1116 | 10.6 | 8.3 | - | 12.9 |
| 45-54 | 1,644 | 15.9 | 13.5 | - | 18.2 | 1636 | 11.3 | 9.2 | - | 13.3 |
| 55-64 | 1,868 | 14.4 | 12.2 | - | 16.5 | 1859 | 9.9 | 8.0 | - | 11.7 |
| 65-74 | 1,540 | 13.2 | 10.9 | - | 15.5 | 1531 | 8.9 | 6.9 | - | 10.9 |
| 75 AND OLDER | 1,070 | 10.4 | 7.8 | - | 12.9 | 1064 | 6.1 | 4.3 | - | 7.9 |
| Race-ethnicity* |  |  |  |  |  |  |  |  |  |  |
| white | 7,344 | 16.0 | 14.8 | - | 17.2 | 7309 | 10.4 | 9.4 | - | 11.4 |
| BLACK | 553 | 18.4 | 14.0 | - | 22.8 | 552 | 13.8 | 9.8 | - | 17.8 |
| HISpanic | 739 | 15.1 | 12.0 | - | 18.2 | 734 | 9.5 | 7.0 | - | 12.1 |
| ASIAN | 291 | 6.9 | 3.3 | - | 10.4 | $\dagger$ |  |  |  |  |
| Disability ${ }^{\text {II }}$ |  |  |  |  |  |  |  |  |  |  |
| disability | 2,848 | 22.5 | 20.2 | - | 24.8 | 2824 | 15.7 | 13.7 | - | 17.7 |
| NO DISABILITY | 5,870 | 13.2 | 12.1 | - | 14.4 | 5853 | 8.5 | 7.5 | - | 9.4 |
| Education |  |  |  |  |  |  |  |  |  |  |
| < HIGH SCHOOL | 649 | 19.8 | 15.6 | - | 24.0 | 645 | 13.6 | 10.0 | - | 17.2 |
| HIGH SCHOOL | 2,108 | 16.2 | 14.1 |  | 18.3 | 2098 | 11.5 | 9.6 | - | 13.3 |
| COLLEGE 1-3 YRS | 2,162 | 15.7 | 13.7 | - | 17.7 | 2150 | 10.0 | 8.3 | - | 11.7 |
| COLLEGE 4+ YRS | 4,260 | 13.7 | 12.5 | - | 15.0 | 4241 | 8.5 | 7.5 | - | 9.6 |
| Household Income |  |  |  |  |  |  |  |  |  |  |
| <\$25,000 | 1,754 | 18.2 | 15.8 |  | 20.5 | 1745 | 12.9 | 10.8 | - | 14.9 |
| \$25,000-34,999 | 645 | 14.8 | 10.9 |  | 18.7 | 642 | 8.6 | 5.6 | - | 11.7 |
| \$35,000-49,999 | 870 | 14.9 | 11.5 |  | 18.3 | 864 | 10.6 | 7.8 | - | 13.3 |
| \$50,000-74,999 | 1,001 | 14.2 | 11.3 | - | 17.0 | 997 | 9.2 | 6.9 | - | 11.5 |
| \$75,000+ | 2,923 | 14.9 | 13.3 | - | 16.6 | 2914 | 9.5 | 8.0 | - | 10.9 |
| * White, Black, and Asian race categories refer to non-Hispanic <br> $\dagger$ Insufficient data |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |

## Section 5.3: Chronic Obstructive Pulmonary Disease (COPD)

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

| Table 5.3 - Chronic Obstructive Pulmonary Disease (COPD) Among Massachusetts Adults, 2015 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Ever diagnosed with Copd |  |  |  |
|  | N | \% | 95\% CI |  |
| Overall | 9,234 | 5.7 | 5.1 | - 6.3 |
| Gender |  |  |  |  |
| male | 4,115 | 5.1 | 4.2 | - 6.0 |
| female | 5,119 | 6.2 | 5.3 | - 7.1 |
| Age Group |  |  |  |  |
| 18-24 | $\dagger$ |  |  |  |
| 25-34 | 1,139 | 3.1 | 1.8 | - 4.5 |
| 35-44 | 1,118 | 3.0 | 1.8 | - 4.3 |
| 45-54 | 1,641 | 6.4 | 4.8 | - 8.0 |
| 55-64 | 1,864 | 6.9 | 5.3 | - 8.5 |
| 65-74 | 1,541 | 8.8 | 6.9 | - 10.8 |
| 75 AND OLDER | 1,066 | 14.2 | 10.9 | - 17.5 |
| RACE-ETHNICITY* |  |  |  |  |
| white | 7,327 | 6.3 | 5.5 | - 7.0 |
| BLACK | 551 | 4.6 | 2.0 | - 7.2 |
| HISPANIC | 743 | 4.0 | 2.2 | - 5.7 |
| ASIAN | $\dagger$ |  |  |  |
| Disability ${ }^{\text {If }}$ |  |  |  |  |
| disability | 2,828 | 14.5 | 12.6 | 16.3 |
| No disability | 5,875 | 2.2 | 1.7 | 2.7 |
| Education |  |  |  |  |
| < HIGH SCHOOL | 643 | 11.5 | 8.3 | - 14.7 |
| HIGH SCHOOL | 2,108 | 7.7 | 6.3 | - 9.2 |
| COLLEGE 1-3 YRS | 2,155 | 6.0 | 4.9 | - 7.2 |
| , COLLEGE 4+ YRS | 4,257 | 2.2 | 1.6 | - 2.7 |
| Household Income |  |  |  |  |
| < $\$ 25,000$ | 1,752 | 11.5 | 9.5 | - 13.6 |
| \$25,000-34,999 | 643 | 6.8 | 4.5 | - 9.1 |
| \$35,000-49,999 | 869 | 7.1 | 4.8 | - 9.5 |
| \$50,000-74,999 | 1,001 | 4.0 | 2.4 | - 5.7 |
| \$75,000+ | 2,923 | 2.6 | 1.8 | - 3.3 |
| * White, Black, and Asian race categories refer to non-Hispanic $\dagger$ Insufficient data |  |  |  |  |

## Section 5.4: Heart Disease and Stroke

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

| Table 5.4.1-Heart Disease Among Massachusetts Adults, Ages 35 Years and Older, 2015 |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Overall | Ever Diagnosed with Myocardial Infarction |  |  |  |  | Ever Diagnosed with Angina or Coronary Heart Disease |  |  |  |  |
|  | N | \% |  | \% |  | N | \% |  | 5\% |  |
|  | 7,233 | 5.7 | 5.0 | - | 6.5 | 7,207 | 5.3 | 4.6 | - | 6.1 |
| Gender |  |  |  |  |  |  |  |  |  |  |
| male | 3,140 | 7.9 | 6.6 | - | 9.3 | 3,133 | 7.0 | 5.8 | - | 8.3 |
| Female | 4,093 | 3.8 | 3.0 | - | 4.6 | 4,074 | 3.9 | 3.0 | - | 4.7 |
| Age Group |  |  |  |  |  |  |  |  |  |  |
| 35-44 | $\dagger$ |  |  |  |  | $\dagger$ |  |  |  |  |
| 45-54 | 1,648 | 3.1 | 2.0 | - | 4.2 | 1,644 | 2.3 | 1.3 | - | 3.3 |
| 55-64 | 1,866 | 5.3 | 3.8 | - | 6.7 | 1,865 | 5.2 | 3.8 | - | 6.5 |
| 65-74 | 1,542 | 9.1 | 6.7 | - | 11.5 | 1,536 | 10.1 | 7.6 | - | 12.5 |
| 75 AND OLDER | 1,064 | 16.6 | 13.1 | - | 20.2 | 1,046 | 13.6 | 10.5 | - | 16.7 |
| Race-ethnicity* |  |  |  |  |  |  |  |  |  |  |
| white | 6,004 | 6.0 | 5.1 | - | 6.8 | 5,980 | 5.6 | 4.8 | - | 6.4 |
| BLACK | 399 | 5.2 | 2.2 | - | 8.3 | $\dagger$ |  |  |  |  |
| HISPANIC | 463 | 7.0 | 3.8 | - | 10.1 | 464 | 4.5 | 2.2 | - | 6.8 |
| ASIAN | $\dagger$ |  |  |  |  | $\dagger$ |  |  |  |  |
| Disability ${ }^{\text {If }}$ |  |  |  |  |  |  |  |  |  |  |
| disability | 2,465 | 11.6 | 9.7 | - | 13.5 | 2,444 | 9.9 | 8.2 | - | 11.6 |
| no disability | 4,402 | 3.1 | 2.4 | - | 3.8 | 4,402 | 3.3 | 2.6 | - | 4.0 |
| Education |  |  |  |  |  |  |  |  |  |  |
| < HIGH SCHOOL | 507 | 14.1 | 9.8 | - | 18.5 | 502 | 9.8 | 6.0 | - | 13.6 |
| High School | 1,707 | 6.9 | 5.2 | - | 8.5 | 1,696 | 6.6 | 5.1 | - | 8.1 |
| COLLEGE 1-3 YRS | 1,663 | 5.4 | 4.0 | - | 6.8 | 1,659 | 5.3 | 3.9 | - | 6.8 |
| COLLEGE 4+ YRS | 3,316 | 2.9 | 2.2 | - | 3.6 | 3,309 | 3.3 | 2.6 | - | 4.1 |
| Household Income |  |  |  |  |  |  |  |  |  |  |
| <\$25,000 | 1,394 | 9.1 | 7.1 | - | 11.2 | 1,387 | 8.4 | 6.4 | - | 10.4 |
| \$25,000-34,999 | 518 | 10.0 | 5.8 | - | 14.2 | 514 | 7.9 | 4.7 | - | 11.1 |
| \$35,000-49,999 | 684 | 10.0 | 6.6 | - | 13.4 | 685 | 7.1 | 4.4 | - | 9.7 |
| \$50,000-74,999 | 798 | 6.2 | 3.5 | - | 8.9 | 797 | 5.6 | 3.0 | - | 8.3 |
| \$75,000+ | 2,365 | 2.3 | 1.6 | - | 3.1 | 2,360 | 2.9 | 2.0 | - | 3.7 |
| * White, Black, and Asian race categories refer to non-Hispanic <br> $\dagger$ Insufficient data <br> TI See p 61 for definition of disability |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |


| Table 5.4.2 - Stroke Among Massachusetts Adults, Ages 35 Years and Older, 2015 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Ever Diagnosed with Stroke |  |  |  |
|  | N | \% | 95\% CI |  |
| Overall | 7,251 | 3.3 | 2.8 | - 3.8 |
| Gender |  |  |  |  |
| MALE | 3,155 | 3.7 | 2.9 | - 4.6 |
| female | 4,096 | 2.9 | 2.3 | - 3.6 |
| Age Group |  |  |  |  |
| 35-44 | $\dagger$ |  |  |  |
| 45-54 | 1,646 | 1.8 | 1.1 | - 2.6 |
| 55-64 | 1,874 | 3.5 | 2.4 | - 4.5 |
| 65-74 | 1,544 | 4.8 | 3.3 | - 6.2 |
| 75 AND OLDER | 1,067 | 8.0 | 5.6 | - 10.5 |
| Race-Ethnicity* |  |  |  |  |
| white | 6,013 | 3.4 | 2.8 | - 4.0 |
| BLACK | $\dagger$ |  |  |  |
| HISPANIC | 466 | 3.9 | 1.9 | - 5.8 |
| ASIAN | $\dagger$ |  |  |  |
| Disability ${ }^{\text {II }}$ |  |  |  |  |
| disability | 2,475 | 7.6 | 6.2 | - 9.1 |
| No disability | 4,412 | 1.2 | 0.8 | - 1.6 |
| Education |  |  |  |  |
| < HIGH SCHOOL | 512 | 9.1 | 5.8 | - 12.4 |
| HIGH SCHOOL | 1,712 | 2.4 | 1.7 | - 3.2 |
| COLLEGE 1-3 YRS | 1,670 | 4.4 | 3.1 | - 5.6 |
| COLLEGE 4+ YRS | 3,316 | 1.7 | 1.2 | - 2.1 |
| Household Income |  |  |  |  |
| <\$25,000 | 1,402 | 6.8 | 5.0 | - 8.5 |
| \$25,000-34,999 | 522 | 4.6 | 2.3 | - 6.8 |
| \$35,000-49,999 | 688 | 3.7 | 1.7 | - 5.7 |
| \$50,000-74,999 | $\dagger$ |  |  |  |
| \$75,000+ | 2,361 | 1.4 | 0.7 | - 2.0 |
| * White, Black, and Asian <br> $\dagger$ Insufficient data <br> II See p 61 for definition | er to non |  |  |  |

## Section 5.5: Arthritis

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

| Table 5.5 - Arthritis Among Massachusetts Adults, 2015 |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Overall | Doctor Diagnosed Arthritis |  |  |  |  | Limitations Due to Arthritis |  |  |  |  |
|  | N | \% | 95\% CI |  | 25.3 | N | \% | 95\% CI |  |  |
|  | 9,214 | 24.1 | 23.0 | - |  | 8,870 | 10.6 | 9.8 | - | 11.5 |
| Gender |  |  |  |  |  |  |  |  |  |  |
| male | 4,110 | 19.4 | 17.9 | - | 21.0 | 3,979 | 8.1 | 7.1 | - | 9.1 |
| Female | 5,104 | 28.5 | 26.8 | - | 30.1 | 4,891 | 13.0 | 11.7 | - | 14.3 |
| Age Group |  |  |  |  |  |  |  |  |  |  |
| 18-24 | $\dagger$ |  |  |  |  | $\dagger$ |  |  |  |  |
| 25-34 | 1,144 | 6.9 | 5.0 | - | 8.8 | 1,129 | 2.5 | 1.3 | - | 3.6 |
| 35-44 | 1,116 | 14.3 | 11.7 | - | 16.8 | 1,091 | 5.6 | 3.9 | - | 7.3 |
| 45-54 | 1,636 | 25.3 | 22.5 | - | 28.0 | 1,583 | 12.7 | 10.5 | - | 14.8 |
| 55-64 | 1,857 | 38.7 | 35.7 | - | 41.8 | 1,766 | 17.4 | 15.0 | - | 19.9 |
| 65-74 | 1,536 | 45.2 | 41.6 | - | 48.8 | 1,465 | 19.5 | 16.6 | - | 22.3 |
| 75 AND OLDER | 1,060 | 52.8 | 48.2 | - | 57.4 | 985 | 24.5 | 20.4 | - | 28.7 |
| Race-ethnicity* |  |  |  |  |  |  |  |  |  |  |
| white | 7,321 | 27.4 | 26.0 | - | 28.8 | 7,047 | 11.9 | 10.9 | - | 12.9 |
| BLACK | 548 | 19.4 | 14.9 | - | 24.0 | 533 | 8.3 | 5.1 | - | 11.5 |
| HISPANIC | 734 | 15.3 | 12.4 | - | 18.3 | 717 | 9.0 | 6.8 | - | 11.3 |
| ASIAN | $\dagger$ |  |  |  |  | $\dagger$ |  |  |  |  |
| Disability ${ }^{\text {II }}$ |  |  |  |  |  |  |  |  |  |  |
| DISABILITY | 2,826 | 47.8 | 45.1 | - | 50.5 | 2,676 | 32.4 | 29.9 | - | 34.9 |
| No disability | 5,857 | 15.3 | 14.2 | - | 16.4 | 5,749 | 2.8 | 2.3 | - | 3.3 |
| Education |  |  |  |  |  |  |  |  |  |  |
| < HIGH SCHOOL | 640 | 31.5 | 26.6 | - | 36.3 | 602 | 18.5 | 14.4 | - | 22.7 |
| High School | 2,102 | 27.4 | 25.0 | - | 29.8 | 1,985 | 11.3 | 9.6 | - | 12.9 |
| COLLEGE 1-3 YRS | 2,159 | 25.9 | 23.6 | - | 28.3 | 2,081 | 12.5 | 10.8 | - | 14.3 |
| COLLEGE 4+ YRS | 4,241 | 18.4 | 17.0 | - | 19.8 | 4,134 | 6.5 | 5.7 | - | 7.4 |
| Household Income |  |  |  |  |  |  |  |  |  |  |
| <\$25,000 | 1,743 | 31.9 | 29.0 | - | 34.9 | 1,659 | 18.6 | 16.1 | - | 21.0 |
| \$25,000-34,999 | 642 | 27.1 | 22.6 | - | 31.7 | 620 | 13.4 | 9.8 | - | 17.0 |
| \$35,000-49,999 | 864 | 28.0 | 23.6 | - | 32.4 | 840 | 12.3 | 9.0 | - | 15.6 |
| \$50,000-74,999 | 999 | 26.1 | 22.5 | - | 29.7 | 977 | 12.6 | 9.7 | - | 15.5 |
| \$75,000+ | 2,918 | 17.9 | 16.2 | - | 19.6 | 2,863 | 6.1 | 5.0 | - | 7.2 |
| * White, Black, and Asian race categories refer to non-Hispanic <br> $\dagger$ Insufficient data |  |  |  |  |  |  |  |  |  |  |
| II See p 61 for definition of disability |  |  |  |  |  |  |  |  |  |  |

## 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.


## Section 5.7: Depression

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


## Section 6: Other Topics

## Section 6.1: Sexual Orientation and Gender Identity

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

All respondents were also asked whether they consider themselves to be transgender. Overall, in 2015, $0.34 \%$ of Massachusetts adults self-identified as transgender. A table of this data is not presented due to the low prevalence.


## Section 6.2: HIV Testing

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

| Table 6.2 - HIV Testing Among Massachusetts Adults, Ages 18-64, 2015 |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Ever Tested for hiv |  |  |  |  | Tested for hiv in Past Year |  |  |  |  |
|  | N | \% | 95\% CI |  |  | N | \% | 95\% CI |  |  |
| Overall | 5,274 | 45.0 | 43.2 | - | 46.8 | 4,682 | 10.1 | 9.0 |  | 11.2 |
| Gender |  |  |  |  |  |  |  |  |  |  |
| male | 2,447 | 43.2 | 40.5 | - | 45.9 | 2,178 | 10.4 | 8.7 | - | 12.1 |
| female | 2,827 | 46.7 | 44.3 | - | 49.1 | 2,504 | 9.8 | 8.3 | - | 11.4 |
| Age Group |  |  |  |  |  |  |  |  |  |  |
| 18-24 | 507 | 30.4 | 24.9 | - | 35.9 | 486 | 15.0 | 11.1 | - | 18.9 |
| 25-34 | 921 | 57.2 | 53.2 | - | 61.1 | 810 | 16.5 | 13.5 | - | 19.4 |
| 35-44 | 898 | 59.1 | 55.1 | - | 63.2 | 766 | 11.6 | 8.9 | - | 14.2 |
| 45-54 | 1,378 | 48.6 | 45.1 | - | 52.0 | 1,206 | 5.9 | 4.2 | - | 7.5 |
| 55-64 | 1,570 | 28.0 | 25.0 | - | 30.9 | 1,414 | 3.1 | 2.1 | - | 4.1 |
| Race-ethnicity* |  |  |  |  |  |  |  |  |  |  |
| white | 4,086 | 41.9 | 39.8 | - | 44.0 | 3,689 | 7.9 | 6.8 | - | 9.0 |
| BLACK | 329 | 70.6 | 64.0 | - | 77.2 | 273 | 22.1 | 15.5 | - | 28.7 |
| Hispanic | 530 | 58.8 | 53.5 | - | 64.0 | 420 | 18.1 | 13.3 | - | 22.8 |
| ASIAN | 204 | 30.3 | 22.8 | - | 37.8 | 192 | 9.7 | 4.8 | - | 14.7 |
| Disability ${ }^{\text {II }}$ |  |  |  |  |  |  |  |  |  |  |
| disability | 1,493 | 49.5 | 45.9 | - | 53.2 | 1,272 | 11.5 | 9.0 | - | 13.9 |
| No disability | 3,730 | 43.5 | 41.3 | - | 45.6 | 3,368 | 9.7 | 8.4 | - | 11.0 |
| Education |  |  |  |  |  |  |  |  |  |  |
| < HIGH SCHOOL | 340 | 49.0 | 41.8 | - | 56.2 | 277 | 12.3 | 7.9 | - | 16.7 |
| HIGH SCHOOL | 1,068 | 41.0 | 37.1 | - | 44.9 | 949 | 10.2 | 7.7 | - | 12.6 |
| COLLEGE 1-3 YRS | 1,252 | 44.2 | 40.4 | - | 48.0 | 1,089 | 9.9 | 7.5 | - | 12.4 |
| COLLEGE 4+ YRS | 2,596 | 47.1 | 44.8 | - | 49.5 | 2,353 | 9.6 | 8.2 | - | 11.1 |
| Household Income |  |  |  |  |  |  |  |  |  |  |
| <\$25,000 | 959 | 58.3 | 54.1 | - | 62.5 | 810 | 18.3 | 14.6 | - | 22.0 |
| \$25,000-34,999 | 301 | 47.0 | 39.2 | - | 54.7 | $\dagger$ |  |  | - |  |
| \$35,000-49,999 | 459 | 43.1 | 36.2 | - | 50.0 | 406 | 9.2 | 5.8 | - | 12.5 |
| \$50,000-74,999 | 608 | 39.2 | 34.2 | - | 44.1 | 548 | 8.1 | 5.5 | - | 10.7 |
| \$75,000+ | 2,080 | 43.6 | 40.8 | - | 46.3 | 1,899 | 8.5 | 6.8 | - | 10.1 |
| * White, Black, and Asian race categories refer to non-Hispanic <br> $\dagger$ Insufficient data <br> II See p 61 for definition of disability |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |

## Section 6.3: Sexual Violence

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

| Table 6.3-Sexual Violence Among Massachusetts Adults, 2015 |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Overall | Sexual Violence, Women |  |  |  |  | Sexual Violence, Men |  |  |  |  |
|  | N | \% | 95\% CI |  |  | N | \% | 95\% CI |  |  |
|  | 1,194 | 15.7 | 12.2 | - | 19.3 | 936 | 5.3 | 2.6 | - | 7.9 |
| Age Group |  |  |  |  |  |  |  |  |  |  |
| 18-24 | 67 | 32.5 | 17.4 | - | 47.5 | $\dagger$ |  |  |  |  |
| 25-34 | $\dagger$ |  |  |  |  | $\dagger$ |  |  |  |  |
| 35-44 | $\dagger$ |  |  |  |  | $\dagger$ |  |  |  |  |
| 45-54 | 229 | 17.3 | 9.5 | - | 25.1 | $\dagger$ |  |  |  |  |
| 55-64 | 238 | 12.3 | 6.2 | - | 18.3 | $\dagger$ |  |  |  |  |
| 65-74 | 205 | 14.5 | 6.9 | - | 22.2 | $\dagger$ |  |  |  |  |
| 75 AND OLDER | $\dagger$ |  |  |  |  | $\dagger$ |  |  |  |  |
| Race-Ethnicity* white | 982 | 15.8 |  | - |  |  | 6.0 | 2.7 | - |  |
| BLack | $\dagger$ |  |  |  |  | $\dagger$ |  |  | - |  |
| HISPANIC | $\dagger$ |  |  |  |  | $\dagger$ |  |  |  |  |
| ASIAN | $\dagger$ |  |  |  |  | $\dagger$ |  |  |  |  |
| Disability ${ }^{\text {II }}$ |  |  |  |  |  |  |  |  |  |  |
| disability | 408 | 20.0 | 12.8 | - | 27.3 | 293 | 7.4 | 3.5 | - | 11.2 |
| No disability | 775 | 13.8 | 9.8 | - | 17.8 | $\dagger$ |  |  |  |  |
| Education |  |  |  |  |  |  |  |  |  |  |
| < HIGH SCHOOL | $\dagger$ |  |  |  |  | $\dagger$ |  |  |  |  |
| High School | 265 | 19.1 | 9.2 | - | 29.0 | $\dagger$ |  |  |  |  |
| COLLEGE 1-3 YRS | 320 | 11.4 | 6.8 | - | 15.9 | $\dagger$ |  |  |  |  |
| COLLEGE 4+ YRS | 539 | 19.3 | 13.7 | - | 24.9 | $\dagger$ |  |  |  |  |
| Household Income < $\$ 25,000$ |  |  |  |  |  |  |  |  |  |  |
| $\begin{aligned} & <\$ 25,000 \\ & \$ 25,000-34,999 \end{aligned}$ | $248$ | 20.4 |  | - |  | $\dagger$ |  |  |  |  |
| $\$ 35,000-49,999$ | $\begin{aligned} & \dagger \\ & \dagger \end{aligned}$ |  |  |  |  | $\dagger$ |  |  |  |  |
| \$50,000-74,999 | $\dagger$ |  |  |  |  | + |  |  |  |  |
| \$75,000+ | 362 | 18.9 | 11.4 | - | 26.5 | $\dagger$ |  |  |  |  |
| * White, Black, and Asian race categories refer to non-Hispanic <br> $\dagger$ Insufficient data <br> II See p 61 for definition of disability |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |

## Section 6.4: Seatbelt Use

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

| Table 6.4 - Seatbelt Use Among Massachusetts Adults, 2015 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Always use a seatbelt |  |  |  |
|  | N | \% |  | 95\% CI |
| Overall | 7,946 | 83.2 | 81.9 | - 84.4 |
| Gender |  |  |  |  |
| male | 3,505 | 77.7 | 75.6 | - 79.7 |
| female | 4,441 | 88.0 | 86.7 | - 89.4 |
| Age Group |  |  |  |  |
| 18-24 | 531 | 72.2 | 66.7 | - 77.7 |
| 25-34 | 941 | 78.9 | 75.6 | - 82.2 |
| 35-44 | 941 | 85.7 | 82.8 | - 88.6 |
| 45-54 | 1,431 | 86.0 | 83.6 | - 88.4 |
| 55-64 | 1,633 | 85.6 | 83.2 | - 88.0 |
| 65-74 | 1,380 | 87.4 | 84.8 | - 90.1 |
| 75 AND OLDER | 935 | 84.7 | 81.2 | - 88.3 |
| Race-Ethnicity* |  |  |  |  |
| white | 6,421 | 83.2 | 81.8 | - 84.7 |
| BLACK | 456 | 77.2 | 71.9 | - 82.6 |
| HISPANIC | 617 | 83.9 | 80.4 | - 87.5 |
| ASIAN | 235 | 87.9 | 83.1 | - 92.8 |
| Disability ${ }^{\text {If }}$ |  |  |  |  |
| disability | 2,562 | 80.9 | 78.6 | - 83.3 |
| no disability | 5,297 | 84.2 | 82.7 | - 85.6 |
| Education |  |  |  |  |
| < HIGH SCHOOL | 544 | 78.0 | 73.2 | - 82.8 |
| HIGH SCHOOL | 1,717 | 78.0 | 75.2 | - 80.7 |
| COLLEGE 1-3 YRS | 1,882 | 80.7 | 77.9 | - 83.5 |
| COLLEGE 4+ YRS | 3,750 | 89.9 | 88.6 | - 91.1 |
| Household income |  |  |  |  |
| $<\$ 25,000$ | 1,509 | 80.9 | 78.0 | - 83.7 |
| \$25,000-34,999 | 568 | 77.5 | 72.6 | - 82.4 |
| \$35,000-49,999 | 771 | 79.3 | 75.2 | - 83.5 |
| \$50,000-74,999 | 891 | 83.0 | 79.7 | - 86.4 |
| \$75,000+ | 2,657 | 87.5 | 85.7 | - 89.3 |
| * White, Black, and Asian race categories refer to non-Hispanic <br> II See p 61 for definition of disability |  |  |  |  |

## Section 6.5: Opioid and Marijuana Use

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

| Table 6.5.1- Opioid Among Massachusetts Adults, 2015 |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Ever Prescribed Opiate |  |  |  |  | Non-medical Use of Opiate in past YEAR |  |  |  |  |
|  | N | \% |  | \% |  | N | \% |  | \% |  |
| Overall | 4,872 | 40.2 | 37.6 | - | 42.8 | 4,920 | 3.7 | 2.5 | - | 5.0 |
| Gender |  |  |  |  |  |  |  |  |  |  |
| male | 2,126 | 39.9 | 35.9 | - | 43.9 | 2,147 | 5.1 | 2.8 | - | 7.4 |
| female | 2,746 | 40.5 | 37.2 | - | 43.8 | 2,773 | 2.5 | 1.4 | - | 3.6 |
| Age Group |  |  |  |  |  |  |  |  |  |  |
| 18-24 | 325 | 20.1 | 13.8 | - | 26.3 | $\dagger$ |  |  |  |  |
| 25-34 | 543 | 41.1 | 33.6 | - | 48.7 | $\dagger$ |  |  |  |  |
| 35-44 | 573 | 43.2 | 36.1 | - | 50.3 | $\dagger$ |  |  |  |  |
| 45-54 | 890 | 47.1 | 40.7 | - | 53.4 | $\dagger$ |  |  |  |  |
| 55-64 | 1,031 | 46.0 | 40.2 | - | 51.8 | $\dagger$ |  |  |  |  |
| 65-74 | 852 | 46.0 | 40.1 | - | 51.9 | $\dagger$ |  |  |  |  |
| 75 AND OLDER | 576 | 30.0 | 23.8 | - | 36.3 | $\dagger$ |  |  |  |  |
| Race-ethnicity* |  |  |  |  |  |  |  |  |  |  |
| white | 3,967 | 45.2 | 42.2 | - | 48.2 | 4,004 | 3.9 | 2.4 | - | 5.4 |
| BLACK | 267 | 25.0 | 17.8 | - | 32.2 | $\dagger$ |  |  |  |  |
| HISPANIC | 367 | 24.0 | 16.8 | - | 31.3 | $\dagger$ |  |  |  |  |
| ASIAN |  |  |  |  |  |  |  |  |  |  |
| Disability ${ }^{\text {If }}$ |  |  |  |  |  |  |  |  |  |  |
| disability | 1,597 | 54.7 | 50.0 | - | 59.4 | 1,621 | 7.1 | 4.1 | - | 10.1 |
| No disability | 3,222 | 34.1 | 31.1 | - | 37.1 | 3,245 | 2.3 | 1.1 | - | 3.4 |
| Education |  |  |  |  |  |  |  |  |  |  |
| < HIGH SCHOOL | 343 | 30.5 | 22.6 | - | 38.3 | $\dagger$ |  |  |  |  |
| High School | 1,062 | 34.0 | 28.6 | - | 39.4 | $\dagger$ |  |  |  |  |
| COLLEGE 1-3 YRS | 1,156 | 46.0 | 40.7 | - | 51.4 | $\dagger$ |  |  |  |  |
| COLLEGE 4+ YRS | 2,278 | 43.1 | 39.3 | - | 46.9 | 2,303 | 1.2 | 0.7 | - | 1.8 |
| Household Income |  |  |  |  |  |  |  |  |  |  |
| <\$25,000 | 937 | 37.0 | 31.5 | - | 42.5 | 947 | 6.1 | 3.4 | - | 8.8 |
| \$25,000-34,999 | 347 | 41.5 | 31.4 | - | 51.7 | $\dagger$ |  |  |  |  |
| \$35,000-49,999 | 472 | 34.3 | 26.0 | - | 42.7 | $\dagger$ |  |  |  |  |
| \$50,000-74,999 | 546 | 43.4 | 35.5 | - | 51.3 | $\dagger$ |  |  |  |  |
| \$75,000+ | 1,614 | 48.5 | 43.9 | - | 53.1 | $\dagger$ |  |  |  |  |
| * White, Black, and Asian race categories refer to non-Hispanic <br> $\dagger$ Insufficient data |  |  |  |  |  |  |  |  |  |  |
| II See p 61 for definition of disability |  |  |  |  |  |  |  |  |  |  |


| Table 6.5.2 - Marijuana Use Among Massachusetts Adults, 2015 |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Ever Prescribed Mariuuana |  |  |  |  | Non-medical Use of Mariuuana in PAST YEAR |  |  |  |  |
| Overall <br> GRDDER | 4,918 | 0.6 | 0.3 | - | 1.0 | 4,923 | 13.2 | 11.3 | - | 15.2 |
|  |  |  |  |  |  |  |  |  |  |  |
| male | $\dagger$ |  |  |  |  | 2,146 | 18.4 | 15.1 | - | 21.8 |
| female | $\dagger$ |  |  |  |  | 2,777 | 8.6 | 6.6 | - | 10.6 |
| Age Group |  |  |  |  |  |  |  |  |  |  |
| 18-24 | $\dagger$ |  |  |  |  | 326 | 33.8 | 25.7 | - | 42.0 |
| 25-34 | $\dagger$ |  |  |  |  | 544 | 25.2 | 18.6 | - | 31.9 |
| 35-44 | $\dagger$ |  |  |  |  | 577 | 13.2 | 8.2 | - | 18.1 |
| 45-54 | $\dagger$ |  |  |  |  | 899 | 7.6 | 4.5 | - | 10.7 |
| 55-64 | $\dagger$ |  |  |  |  | 1,036 | 7.2 | 4.5 | - | 10.0 |
| 65-74 | $\dagger$ |  |  |  |  | 869 | 3.6 | 1.8 | - | 5.4 |
| 75 AND OLDER |  |  |  |  |  | $\dagger$ |  |  |  |  |
| Race-Ethnicity* |  |  |  |  |  |  |  |  |  |  |
| white | 4,004 | 0.6 | 0.3 | - | 0.9 | 4,008 | 14.3 | 12.0 | - | 16.6 |
| BLACK | $\dagger$ |  |  |  |  | 269 | 12.7 | 6.6 | - | 18.8 |
| HISPANIC | $\dagger$ |  |  |  |  | 373 | 7.7 | 3.9 | - | 11.5 |
| ASIAN | $\dagger$ |  |  |  |  | $\dagger$ |  |  |  |  |
| Disability ${ }^{\text {If }}$ |  |  |  |  |  |  |  |  |  |  |
| DISABILITY | $\dagger$ |  |  |  |  | 1,625 | 15.3 | 11.4 | - | 19.2 |
| No disability | $\dagger$ |  |  |  |  | 3,244 | 12.3 | 10.0 | - | 14.5 |
| Education |  |  |  |  |  |  |  |  |  |  |
| < HIGH SCHOOL | $\dagger$ |  |  |  |  | 346 | 17.0 | 8.7 | - | 25.3 |
| HIGH SCHOOL | $\dagger$ |  |  |  |  | 1,075 | 15.1 | 11.0 | - | 19.2 |
| COLLEGE 1-3 YRS | $\dagger$ |  |  |  |  | 1,164 | 13.5 | 9.8 | - | 17.3 |
| COLLEGE 4+ YRS | $\dagger$ |  |  |  |  | 2,306 | 10.8 | 8.3 | - | 13.3 |
| Household Income |  |  |  |  |  |  |  |  |  |  |
| $<\$ 25,000$ | 946 | 1.3 | 0.6 | - | 2.0 | 946 | 13.6 | 9.9 | - | 17.4 |
| \$25,000-34,999 | $\dagger$ |  |  |  |  | 347 | 10.3 | 5.7 | - | 15.0 |
| \$35,000-49,999 | $\dagger$ |  |  |  |  | 475 | 23.4 | 14.2 | - | 32.6 |
| \$50,000-74,999 | $\dagger$ |  |  |  |  | 553 | 11.4 | 5.9 | - | 16.9 |
| \$75,000+ | $\dagger$ |  |  |  |  | 1,627 | 13.1 | 9.9 | - |  |
| * White, Black, and Asian race categories refer to non-Hispanic <br> $\dagger$ Insufficient data |  |  |  |  |  |  |  |  |  |  |

## Appendix

## Age-Adjusted Percentages For Selected Topics

| MASSACHUSETTS BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM, 2015 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Overall | Fair or Poor Health |  |  |  | Poor Mental Health |  |  |  | Poor Physical Health |  |  |  | DISABILITY |  |  |  | No Health Insurance (Ages 18-64) |  |  |
|  | \% | 95\% CI |  |  | \% | 95\% CI |  |  | \% | 95\% CI |  |  | \% | 95\% CI |  |  | \% | 95\% CI |  |
|  | 14.3 | 13.2 | - | 15.4 | 11.4 | 10.3 | - | 12.5 | 9.8 | 8.9 | - | 10.8 | 28.3 | 26.9 | - | 29.6 | 3.7 | 2.9 | - 4.4 |
| Gender |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| male | 14.0 | 12.5 | - | 15.6 | 9.4 | 8.0 | - | 10.9 | 9.0 | 7.7 |  | 10.3 | 27.4 | 25.5 | - | 29.4 | 5.1 | 3.9 | - 6.3 |
| FEmALE | 14.3 | 12.9 | - | 15.7 | 12.5 | 11.1 | - | 14.0 | 10.5 | 9.3 | - | 11.7 | 29.0 | 27.1 | - | 30.9 | 2.2 | 1.5 | - 3.0 |
| Race-Ethnicity* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| white | 12.0 | 10.9 | - | 13.2 | 11.9 | 10.5 | - | 13.2 | 9.3 | 8.3 | - | 10.3 | 28.3 | 26.7 | - | 30.0 | 2.5 | 1.7 | - 3.3 |
| BLACK | 19.0 | 14.3 | - | 23.7 | 15.2 | 10.7 | - | 19.7 | 14.4 | 9.6 | - | 19.1 | 28.1 | 22.6 | - | 33.6 | 7.3 | 3.7 | - 10.9 |
| HISPANIC | 29.3 | 24.9 | - | 33.7 | 10.7 | 7.9 | - | 13.4 | 13.1 | 10.0 |  | 16.2 | 37.5 | 32.9 | - | 42.0 | 9.0 | 6.1 | - 11.8 |
| ASIAN | 11.0 | 11.0 | - | 11.0 | 2.3 | 2.2 | - | 2.3 | 5.3 | 5.3 | - | 5.4 | 10.7 | 10.6 | - | 10.8 | 1.1 | 1.1 | - 1.1 |
| Disability ${ }^{\text {II }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| DISABILITY | 36.8 | 33.6 | - | 40.0 | 29.4 | 26.3 | - | 32.5 | 28.5 | 25.6 | - | 31.5 | n/a |  |  |  | 5.0 | 3.0 | - 7.0 |
| NO DISABILITY | 5.3 | 4.5 | - |  | 5.1 | 4.1 | - | 6.0 | 2.5 | 1.9 | - |  | n/a |  |  |  | 3.2 | 2.5 | - 4.0 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| < high school | 40.3 | 35.0 | - | 45.6 | 19.9 | 14.7 | - | 25.1 | 25.7 | 20.7 | - | 30.7 | 52.8 | 47.2 | - | 58.5 | 10.3 | 10.2 | - 10.4 |
| HIGH SCHOOL | 16.9 | 14.9 | - | 18.9 | 13.9 | 11.6 | - | 16.2 | 11.0 | 9.2 | - | 12.8 | 30.0 | 27.2 | - | 32.7 | 5.2 | 3.6 | - 6.9 |
| COLLEGE 1-3 YRS | 14.2 | 12.0 | - | 16.4 | 13.0 | 10.8 | - | 15.2 | 10.9 | 9.0 | - | 12.8 | 32.5 | 29.5 | - | 35.4 | 3.6 | 2.2 | - 4.9 |
| COLLEGE 4+ YRS | 5.6 |  | - |  | 6.3 | 5.3 | - |  | 4.5 | 3.7 | - |  | 17.9 | 16.4 | - |  | 1.1 | 0.6 | - 1.6 |
| Household Income |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| < \$25,000 | 31.3 | 28.1 | - | 34.4 | 22.5 | 19.6 | - | 25.5 | 21.9 | 19.1 | - | 24.7 | 48.6 | 45.2 | - | 52.0 | 6.9 | 4.8 | - 9.0 |
| \$25,000-34,999 | 19.7 | 15.3 |  | 24.1 | 13.0 | 8.6 | - | 17.4 | 14.0 | 13.7 | - | 14.3 | 35.5 | 29.6 | - | 41.5 | 8.5 | 8.4 | - 8.6 |
| \$35,000-49,999 | 11.2 | 8.2 | - | 14.2 | 13.8 | 9.3 | - | 18.2 | 6.8 | 4.5 | - | 9.1 | 25.4 | 21.3 | - | 29.4 | 5.2 | 5.1 | - 5.3 |
| \$50,000-74,999 | 9.9 |  | - | 13.2 | 7.1 | 4.8 | - |  | 8.4 | 5.2 | - | 11.5 | 24.7 | 20.5 | - | 28.8 | $\dagger$ |  |  |
| \$75,000+ | 5.0 | 3.5 | - | 6.5 | 6.2 | 4.6 | - | 7.7 | 4.4 | 3.2 | - | 5.6 | 17.2 | 15.1 | - | 19.3 | $\dagger$ |  |  |
| * White, Black, and Asian race categories refer to non-Hispanic $\dagger$ Insufficient data |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## Age-Adjusted Percentages for Selected Topics (continued)

| Massachusetts Behavioral Risk Factor Surveillance System, 2015 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Overall | Personal Doctor |  |  | No Doctor due to Cost |  |  |  | Checkup in Past Year |  |  |  | Current Smoker |  |  |  | Former Smoker |  |  |
|  | \% | 95\% CI |  | \% | 95\% CI |  |  | \% | 95\% CI |  |  | \% | 95\% CI |  |  | \% | 95\% CI |  |
|  | 88.2 | 87.2 | - 89.2 | 8.6 | 7.7 | - | 9.5 | 76.8 | 75.5 | - | 78.1 | 14.3 | 13.2 | - | 15.4 | 25.7 | 24.4 | - 27.0 |
| Gender |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| MALE | 84.4 | 82.8 | - 85.9 | 8.5 | 7.4 | - | 9.7 | 72.5 | 70.5 | - | 74.4 | 16.7 | 15.0 | - | 18.4 | 27.6 | 25.7 | - 29.6 |
| female | 91.6 | 90.5 | - 92.8 | 9.1 | 7.9 | - | 10.3 | 80.9 | 79.3 | - | 82.5 | 12.2 | 10.8 | - | 13.6 | 24.1 | 22.4 | - 25.7 |
| Race-Ethnicity* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| white | 89.6 | 88.5 | - 90.7 | 6.7 | 5.9 | - | 7.6 | 75.7 | 74.2 | - | 77.2 | 15.5 | 14.1 | - | 16.8 | 28.7 | 27.1 | - 30.3 |
| BLACK | 86.1 | 82.2 | - 90.0 | 13.8 | 9.4 | - | 18.1 | 84.7 | 81.0 | - | 88.4 | 16.2 | 11.6 | - | 20.7 | 16.8 | 12.5 | - 21.1 |
| HISPANIC | 81.4 | 78.2 | 84.6 | 22.2 | 18.5 | - | 25.8 | 76.7 | 72.9 | - | 80.4 | 10.5 | 8.0 | - | 12.9 | 19.2 | 15.1 | - 23.3 |
| ASIAN | 87.8 | 87.6 | - 88.0 | 4.9 | 4.8 | - | 4.9 | 76.1 | 75.7 | - | 76.5 | 4.2 | 4.2 | - |  | 11.6 | 11.5 | - 11.8 |
| Disability ${ }^{\text {II }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| DISABILITY | 87.9 | 85.5 | 90.3 | 15.4 | 13.0 | - | 17.7 | 77.0 | 74.1 | - | 80.0 | 23.7 | 20.9 | - | 26.5 | 27.4 | 24.7 | - 30.0 |
| no disability | 88.3 | 87.2 | - 89.4 | 6.1 | 5.3 | - | 7.0 | 76.6 | 75.1 | - | 78.1 | 10.9 | 9.8 | - | 12.1 | 25.0 | 23.5 | - 26.5 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| < HIGH SChool | 80.5 | 75.9 | - 85.1 | 19.0 | 14.8 | - | 23.2 | 73.3 | 68.0 | - | 78.5 | 24.5 | 19.9 | - | 29.1 | 27.0 | 21.8 | - 32.2 |
| High School | 86.6 | 84.4 | - 88.8 | 10.6 | 8.7 | - | 12.5 | 77.4 | 74.6 | - | 80.1 | 21.1 | 18.4 | - | 23.8 | 27.2 | 24.4 | - 30.0 |
| college 1-3 YRS | 89.3 | 87.4 | 91.2 | 9.4 | 7.7 | - | 11.2 | 79.2 | 76.7 | - | 81.8 | 18.0 | 15.6 | - | 20.5 | 28.1 | 25.5 | - 30.8 |
| COLLEGE 4+ YRS | 89.3 | 88.0 | - 90.6 | 4.6 | 3.7 | - | 5.4 | 74.8 | 73.0 | - | 76.6 | 5.9 | 4.9 | - | 6.9 | 23.0 | 21.4 | - 24.5 |
| Household Income |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| < $\$ 25,000$ | 82.2 | 79.4 | - 85.0 | 18.5 | 15.7 | - | 21.4 | 77.2 | 74.2 | - | 80.2 | 24.9 | 21.9 | - | 27.9 | 24.1 | 21.3 | - 27.0 |
| \$25,000-34,999 | 82.2 | 77.6 | - 86.8 | 14.2 | 9.6 | - | 18.8 | 78.2 | 73.6 | - | 82.8 | 16.8 | 12.5 | - | 21.1 | 25.5 | 20.8 | - 30.1 |
| \$35,000-49,999 | 88.3 | 85.1 | 91.5 | 10.1 | 6.6 | - | 13.5 | 78.2 | 74.0 | - | 82.5 | 21.1 | 16.9 | - | 25.3 | 23.9 | 20.2 | - 27.7 |
| \$50,000-74,999 | 89.7 | 86.2 | 93.1 | 7.7 | 5.3 | - | 10.1 | 77.0 | 72.9 | - | 81.0 | 15.6 | 12.2 | - | 19.0 | 25.5 | 21.4 | - 29.5 |
| \$75,000+ | 92.1 | 90.8 | - 93.5 | 3.5 | 2.5 | - | 4.5 | 76.8 | 74.6 | - | 78.9 | 9.1 | 7.4 | - | 10.9 | 27.5 | 25.5 | 29.5 |
| * White, Black, and Asian race categories refer to non-Hispanic <br> $\dagger$ Insufficient data <br> II See p 61 for definition of disability |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## Age-Adjusted Percentages for Selected Topics (continued)

| MASSACHUSETTS BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM, 2015 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Overall | Use Smokeless Tobacco |  |  | E-Cigarette Use |  |  |  | Quit Attempt |  |  |  | Environmental Smoke |  |  |  | Binge Drinking |  |  |
|  | \% | 95\% CI |  | \% | 95\% CI |  |  | \% | 95\% CI |  |  | \% | 95\% CI |  |  | \% | 95\% CI |  |
|  | 2.7 | 1.9 | - 3.4 | 2.9 | 2.3 | - | 3.5 | 61.1 | 57.2 | - | 65.0 | 35.1 | 33.5 | - | 36.8 | 18.7 | 17.5 | - 19.9 |
| Gender |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| MALE | 4.6 | 3.2 | - 6.0 | 3.7 | 2.7 | - | 4.7 | 61.6 | 56.5 | - | 66.8 | 38.3 | 35.9 | - | 40.7 | 23.9 | 21.9 | - 25.9 |
| FEmALE | 0.8 | 0.5 | - 1.2 | 2.1 | 1.4 | - | 2.7 | 61.2 | 55.3 | - | 67.1 | 32.2 | 30.1 | - | 34.4 | 13.9 | 12.5 | - 15.4 |
| Race-Ethnicity* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| white | 3.0 | 2.0 | 4.0 | 3.5 | 2.7 | - | 4.3 | 59.3 | 54.9 | - | 63.6 | 35.5 | 33.6 | - | 37.5 | 22.1 | 20.5 | - 23.6 |
| BLaCk | $\dagger$ |  |  | $\dagger$ |  |  |  | 70.6 | 66.7 | - | 74.5 | 38.8 | 32.4 | - | 45.2 | 14.1 | 9.8 | - 18.4 |
| HISPANIC | 1.5 | 0.6 | 2.4 | $\dagger$ |  |  |  | 70.9 | 70.9 | - | 70.9 | 30.8 | 26.2 | - | 35.4 | 10.2 | 7.6 | - 12.9 |
| ASIAN | 2.5 | 2.4 | - 2.6 | 1.7 | 1.7 | - | 1.8 | 23.5 | 23.5 | - | 23.5 | 35.0 | 34.9 | - | 35.1 | 8.6 | 8.5 | - 8.6 |
| Disability ${ }^{\text {II }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| DISABILITY | 3.4 | 2.2 | - 4.6 | 4.1 | 2.9 | - | 5.2 | 66.6 | 61.2 | - | 71.9 | 45.0 | 41.5 | - | 48.5 | 17.8 | 15.1 | - 20.6 |
| no disability | 2.3 | 1.5 | - 3.2 | 2.5 | 1.8 | - | 3.1 | 55.9 | 50.6 | - | 61.2 | 31.3 | 29.5 | - | 33.1 | 19.1 | 17.7 | - 20.5 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| < HIGH SCHOOL | $\dagger$ |  |  | 4.8 | 2.1 | - |  | 77.2 | 76.0 | - | 78.4 | 38.8 | 32.5 | - | 45.1 | 15.3 | 10.4 | - 20.3 |
| HIGH SCHOOL | 2.9 | 1.9 | - 4.0 | 2.5 | 1.6 | - | 3.4 | 53.1 | 46.2 | - | 60.0 | 41.9 | 38.2 | - | 45.5 | 16.7 | 14.1 | - 19.2 |
| COLLEGE 1-3 YRS | 2.2 | 1.0 | - 3.4 | 4.2 | 2.7 | - | 5.7 | 62.8 | 62.3 | - | 63.4 | 39.7 | 36.4 | - | 43.1 | 19.8 | 17.3 | - 22.4 |
| COLLEGE 4+ YRS | 1.7 | 1.1 | - 2.3 | 1.9 | 1.2 | - | 2.6 | 58.4 | 57.8 | - | 59.0 | 27.2 | 25.1 | - | 29.3 | 21.8 | 20.1 | - 23.5 |
| Household Income |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $<\$ 25,000$ | 2.8 | 1.6 | - 4.1 | 4.2 | 2.8 | - | 5.5 | 64.0 | 57.6 | - | 70.4 | 43.3 | 39.4 | - | 47.2 | 15.4 | 12.8 | - 18.1 |
| \$25,000-34,999 | 3.0 | 1.3 | - 4.7 | $\dagger$ |  |  |  | 51.0 | 50.4 | - | 51.5 | 39.9 | 33.6 | - | 46.2 | 15.9 | 11.4 | - 20.3 |
| \$35,000-49,999 | $\dagger$ |  |  | $\dagger$ |  |  |  | 59.0 | 59.0 |  | 59.0 | 47.8 | 42.3 | - | 53.4 | 20.6 | 16.2 | - 25.0 |
| \$50,000-74,999 | 2.3 | 1.1 | - 3.6 | 3.3 | 1.6 | - | 4.9 | 51.8 | 40.8 | - | 62.7 | 34.7 | 29.7 | - | 39.6 | 20.7 | 17.1 | - 24.4 |
| \$75,000+ | 2.1 | 1.4 | - 2.9 | 3.1 | 1.8 | - | 4.3 | 61.5 | 60.8 | - | 62.3 | 29.1 | 26.5 | - | 31.7 | 23.5 | 21.3 | - 25.7 |
| * White, Black, and Asian race categories refer to non-Hispanic $\dagger$ Insufficient data <br> II See p 61 for definition of disability |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## Age-Adjusted Percentages for Selected Topics (continued)



## Age-Adjusted Percentages for Selected Topics (continued)



## Age-Adjusted Percentages for Selected Topics (continued)



## Age-Adjusted Percentages for Selected Topics (continued)

| MASSACHUSETTS BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM, 2015 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Overall | Limitations due to Arthritis |  |  |  | Ever Diagnosed with Cancer |  |  |  | Ever Diagnosed with Depression |  |  |  | SELF-IDENTIFIED AS Homosexual, bisexual, or OTHER |  |  |  | Ever Tested for HIV - ages$18-64$ |  |  |  |
|  | \% | 95\% CI |  |  | \% | 95\% CI |  |  | \% | 95\% CI |  |  | \% | 95\% CI |  |  | \% | 95\% CI |  |  |
|  | 10.4 | 9.6 | - | 11.2 | 10.7 | 9.9 | - | 11.4 | 21.8 | 20.5 | - | 23.0 | 5.0 | 4.3 | - | 5.7 | 47.6 | 45.7 | - | 49.4 |
| Gender |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| MALE | 8.0 | 7.0 | - |  | 9.6 | 8.6 | - | 10.6 | 16.3 | 14.7 | - | 17.9 | 4.8 | 3.8 | - | 5.8 | 45.0 | 42.2 | - | 47.7 |
| Female | 11.6 | 10.5 | - | 12.8 | 11.5 | 10.4 | - | 12.6 | 25.5 | 23.7 | - | 27.2 | 5.3 | 4.3 | - | 6.3 | 49.9 | 47.4 | - | 52.3 |
| Race-Ethnicity* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| white | 10.3 | 9.4 | - | 11.2 | 11.5 | 10.6 | - | 12.3 | 22.8 | 21.3 | - | 24.3 | 5.6 | 4.7 | - | 6.5 | 45.6 | 43.4 | - | 47.7 |
| BLACK | 8.7 | 5.4 | - | 12.0 | 5.5 | 2.8 | - |  | 16.3 | 11.7 | - | 20.9 | 5.5 | 2.9 | - | 8.1 | 72.1 | 66.2 | - | 77.9 |
| HISPANIC | 11.4 | 8.6 | - | 14.2 | 5.3 | 3.2 | - | 7.5 | 25.2 | 21.1 | - | 29.4 | 2.9 | 1.4 | - | 4.3 | 58.2 | 52.9 | - | 63.6 |
| ASIAN | 0.3 | 0.3 | - |  | 7.3 | 7.3 | - | 7.4 | 4.3 | 4.3 | - | 4.4 | 2.9 | 2.8 | - | 3.0 | 29.8 | 29.3 | - | 30.4 |
| DISABILITY ${ }^{\text {II }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| DISABILITY | 28.0 | 25.5 | - | 30.5 | 13.0 | 11.3 | - | 14.7 | 48.3 | 45.2 | - | 51.5 | 7.5 | 5.5 | - | 9.4 | 53.9 | 50.2 | - | 57.7 |
| NO DISABILITY | 2.7 | 2.2 | - | 3.2 | 9.8 | 8.9 | - | 10.7 | 12.1 | 11.0 | - | 13.2 | 4.3 | 3.6 | - | 5.0 | 45.4 | 43.3 | - | 47.5 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| < high School | 17.5 | 13.8 | - | 21.1 | 8.5 | 5.9 | - | 11.1 | 33.0 | 28.0 | - | 38.1 | $\dagger$ |  |  |  | 51.9 | 51.2 | - | 52.7 |
| HIGH SCHOOL | 9.9 | 8.4 |  | 11.3 | 10.2 | 8.5 | - | 11.9 | 21.8 | 19.2 | - | 24.4 | 5.1 | 3.5 | - | 6.7 | 45.2 | 41.1 | - | 49.3 |
| COLLEGE 1-3 YRS | 13.0 | 11.0 | - | 14.9 | 11.0 | 9.5 | - | 12.6 | 23.5 | 20.9 | - | 26.2 | 3.8 | 2.6 | - | 5.0 | 49.2 | 45.3 | - | 53.0 |
| COLLEGE 4+ YRS | 6.4 | 5.6 | - |  | 11.8 | 10.8 | - | 12.8 | 16.5 | 15.1 | - | 18.0 | 6.3 | 5.1 | - | 7.4 | 48.0 | 45.5 | - | 50.5 |
| Household Income |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| < \$25,000 | 17.7 | 15.3 | - | 20.1 | 9.6 | 7.9 | - | 11.3 | 34.6 | 31.3 | - | 37.9 | 5.0 | 3.4 | - | 6.5 | 60.9 | 56.7 | - | 65.1 |
| \$25,000-34,999 | 11.2 | 7.9 | - | 14.4 | 8.7 | 6.4 | - | 10.9 | 25.1 | 19.7 | - | 30.5 | 4.4 | 2.3 | - |  | 48.5 | 47.7 | - | 49.2 |
| \$35,000-49,999 | 10.7 | 7.8 | - | 13.7 | 8.5 | 6.7 | - | 10.4 | 23.3 | 18.7 | - | 27.8 | 4.8 | 2.6 | - | 7.0 | 46.5 | 46.2 | - | 46.9 |
| \$50,000-74,999 | 10.8 | 8.3 | - | 13.2 | 12.3 | 9.7 | - | 14.9 | 20.3 | 16.6 | - | 24.0 | 7.1 | 4.1 | - | 10.2 | 40.8 | 35.5 | - | 46.1 |
| \$75,000+ | 6.0 |  | - |  | 11.2 | 9.9 |  | 12.5 | 15.4 | 13.5 | - | 17.4 | 5.5 | 4.3 | - | 6.7 | 44.9 | 42.0 | - | 47.8 |
| * White, Black, and Asian race categories refer to non-Hispanic $\dagger$ Insufficient data |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## Age-Adjusted Percentages for Selected Topics (continued)



Massachusetts and National Estimates

| Massachusetts Behavioral Risk Factor Surveillance System, 2015 |  |  |  |
| :---: | :---: | :---: | :---: |
| Variables | MA | $\begin{gathered} \text { US MEDIAN }^{I I} \\ \% \end{gathered}$ | $\begin{gathered} \hline \hline \text { US RANGE }{ }^{\text {I }} \\ \% \end{gathered}$ |
| Overall Health Measures |  |  |  |
| FAIR OR POOR HEALTH | 14.6 | 16.4 | 12.0-36.4 |
| 15+ POOR MENTAL HEALTH DAYS | 11.0 | 10.7 | 6.6-14.7 |
| $15+$ DAYS IN POOR PHYSICAL HEALTH | 10.0 | 10.3 | 7.7-17.2 |
| Disability | 29.4 | 30.0 | 24.2-41.7 |
| Health Care Access and Utilization |  |  |  |
| No Health Insurance (18-64) | 3.4 | + |  |
| Have personal health care provider | 88.9 | 79.0 | 64.7-88.9 |
| Could not see doctor due to cost | 8.6 | 12.2 | 7.2-19.9 |
| Checkup in Past Year | 78.0 | 70.2 | 57.1-81.0 |
| RISK FACTORS AND PREVENTIVE BEHAVIORS |  |  |  |
| Current smoker | 14.0 | 17.5 | 9.1-27.4 |
| Former smoker | 26.9 | 25.0 | 16.1-31.6 |
| Quit attempt among current Smokers | 60.7 | 59.4 | 53.3-69.6 |
| Use Smokeless tobacco | 2.6 | 4.0 | 1.1-9.3 |
| Binge drinking | 17.7 | 16.3 | 10.3-27.2 |
| Heavy drinking | 7.2 | 5.9 | 3.5-9.1 |
| Overweight | 59.7 | 65.8 | 54.4-71.1 |
| Obesity | 24.3 | 29.8 | 20.2-36.2 |
| Met guidelines for aerobic activity | 51.8 | 51.0 | 34.1-60.6 |
| Met guidelines For muscle-strengthening activity | 31.5 | 30.2 | 10.9-35.4 |
| Consumed fruits/vegetables 5+ Times per day | 19.6 | 15.7 | 6.6-23.8 |
| Cholesterol Checked in Past 5 Years | 83.7 | 77.7 | 68.3-84.0 |
| high Cholesterol | 34.5 | 36.3 | 31.1-42.0 |
| High Blood Pressure | 29.6 | 30.9 | 23.6-42.7 |
| Take Medicine for High blood Pressure | 78.9 | 78.1 | 65.4-83.4 |
|  |  |  |  |
| Flu vaccine in past year (18-49) | 36.1 | 33.4 | 21.7-46.6 |
| Flu vaccine in past year ( $50-64$ ) | 46.5 | 44.0 | 21.5-54.6 |
| Flu vaccine in past year (65+) | 61.0 | 61.3 | 42.6-70.6 |
| Ever had pneumonia vaccination (65+) | 73.2 | 72.5 | 29.0-78.7 |
| Chronic Health Conditions |  |  |  |
| Diabetes | 8.9 | 10.0 | 6.8-16.5 |
| Ever had asthma | 15.5 | 14.3 | 11.1-17.9 |
| Currently have asthma | 10.2 | 9.2 | 6.5-11.9 |
| Have Arthritis | 24.1 | 24.7 | 15.8-38.0 |
| Limitations Due to Arthritis | 10.6 | 11.4 | 6.5-21.1 |
| Myocardial infarction (35+) | 5.7 | 5.8 | 4.0-9.3 |
| Angina or Coronary Heart Disease (35+) | 5.3 | 5.4 | 3.6-9.7 |
| Stroke (35+) | 3.2 | 4.1 | 2.3-6.2 |
| Chronic Obstructive Pulmonary Disease | 5.7 | 6.1 | 3.5-13.3 |
| Ever diagnosed with cancer | 11.6 | 11.8 | 4.1-14.6 |
| EvER DIAGNOSED WITH DEPRESSION | 20.9 | 18.9 | 9.4-26.7 |
| OTHER TOPICS |  |  |  |
| Ever tested for Hiv (18-64) | 45.0 | 42.1 | 26.8-76.3 |
| Tested for hiv in Past Year (18-64) | 10.1 | 11.1 | 6.5-42.0 |
| ALWAYS WEAR A SEATBELT | 83.2 | 86.5 | 69.0-94.2 |
| ${ }^{I I}$ The US median percentage and range are based on data for all 50 states, District of Columbia, and Puerto Rico. $\dagger$ No comparable US data available |  |  |  |

MASSACHUSETTS BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM, 2015

|  | PERCENTAGE OF NON-RESPONSE* |
| :--- | :---: |
| $\%$ |  |

Overall Health Measures
FAIR OR POOR HEALTH
0.4

15+ DAYS IN POOR PHYSICAL HEALTH IN PAST MONTH
3.1
$15+$ POOR MENTAL HEALTH DAYS IN PAST MONTH $\quad 2.3$
DISABILITY
5.8

Health Care Access and Utilization
Have Personal Health Care Provider 0.7
COULD NOT SEE DOCTOR DUE TO COST $\quad 0.4$

| CHECKUP IN PAST YEAR | 1.6 |
| :--- | :--- |

RISK FACTORS AND PREVENTIVE BEHAVIORS
CURRENT SMOKER $\quad 6.0$
USE SMOKELESS TOBACCO $\quad 5.5$
CURRENT USE OF E-CIGARETTES $\quad 19.4$
EXPOSED TO ENVIRONMENTAL SMOKE $\quad 21.0$

| BINGE DRINKING |
| :--- |

HEAVY DRINKING $\quad 8.9$
OVERWEIGHT $\quad 11.7$
OBESITY $\quad 11.7$
Met Recommendation for Aerobic Activity $\quad 17.2$
Met Recommendation for Muscle Strengthening Activity 14.7
5 Or More Servings of Fruits or Vegetables $\quad 18.5$
Cholesterol Checked in Past 5 Years $\quad 4.8$
High Blood Pressure $\quad 0.3$
Immunization
FLU VACCINE IN THE PAST YEAR (18-49) 17.4
FLU VACCINE IN THE PAST YEAR (50-64) $\quad 12.7$
Flu Vaccine in the Past Year (65+) $\quad 11.5$
EVER HAD PNEUMONIA VACCINE (65+) 15.9
HPV VACCINE (FEMALES 18-34) 33.2
Had Hepatitis B vaccine 29.9
SHINGLES VACCINE (60+) $\quad 14.4$
Chronic Health Conditions
Diabetes
0.2

| EVER HAD ASTHMA | 0.5 |
| :--- | :--- |

CURRENTLY HAVE ASTHMA $\quad 1.0$
DOCTOR DIAGNOSED ARTHRITIS $\quad 0.9$
Limitations Due to Arthritis $\quad 4.6$
HEART ATTACK (35+) 0.6
Angina or Coronary Heart Disease (35+) 0.9
STROKE (35+) 0.3
EVER DIAGNOSED WITH CANCER 0.5
Chronic Obstructive Pulmonary Disease 0.7
EVER DIAGNOSED WITH DEPRESSION $\quad 0.7$
OTHER TOPICS
SEXUAL ORIENTATION 20.4
EVER TESTED FOR HIV (18-64) $\quad 18.4$
ALWAYS WEAR A SEATBELT $\quad 14.5$
SEXUAL Violence $\quad 24.8$
Ever Prescribed Opiate $\quad 18.6$
NON-MEDICAL USE OF OPIATE IN PAST YEAR $\quad 17.8$

| EVER Prescribed Marijuana | 17.8 |
| :--- | :--- |


| NON-MEDICAL USE OF MARIJUANA IN PAST YEAR | 17.7 |
| :--- | ---: |

[^7]
## Terms, Definitions and Statistical Methodology

This report presents data from the combined sample - both landline and cell phone respondents. The combined sample contained 9,294 respondents.

- The survey design included three 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 1,486 landline respondents and 1,663 cell phone respondents,
- Split 2 contained 1,354 landline respondents and 1,479 cell phone respondents,
- Split 3 contained 1,436 landline respondents and 1,534 cell phone respondents.
- In order to obtain more information about minorities, cities of Boston, Brockton, Lowell, Lynn, New Bedford, Quincy, Springfield, and Worcester were over-sampled.

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 ( $\mathbf{N}$ ) 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 ageadjusted. 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 $(95 \% \mathrm{Cl})$ 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.'

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

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

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

## LIMITATIONS

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

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


[^0]:    * White, Black, and Asian race categories refer to non-Hispanic

    II See p 61 for definition of disability

[^1]:    * White, Black, and Asian race categories refer to non-Hispanic
    $\dagger$ Insufficient data
    II See p 61 for definition of disability

[^2]:    * White, Black, and Asian race categories refer to non-Hispanic
    $\dagger$ Insufficient data
    II See p 61 for definition of disability

[^3]:    * White, Black, and Asian race categories refer to non-Hispanic

    II See p 61 for definition of disability

[^4]:    * White, Black, and Asian race categories refer to non-Hispanic

    II See p 61 for definition of disability

[^5]:    * White, Black, and Asian race categories refer to non-Hispanic
    $\dagger$ Insufficient data
    II See p 61 for definition of disability
    ** Analysis conducted among those who reported ever having had vaccine

[^6]:    * White, Black, and Asian race categories refer to non-Hispanic
    $\dagger$ Insufficient data
    II See p 61 for definition of disability

[^7]:    * The item-specific unweighted non-response $\%$ was calculated using the number of respondents who had finished the demographic section of the 2015 BRFSS as the denominator and those who reported don't know or refused as the numerator.

