



***Wisconsin Tobacco Facts:
Mental and Behavioral Health
April 2022***

**Center for Urban Population Health
University of Wisconsin-Milwaukee**



CUPH
Center for Urban
Population Health
*Data-driven. Evidence-based.
Community-engaged.*

ACKNOWLEDGEMENTS

This report was prepared by Karen A. Palmersheim, Ph.D. Dr. Palmersheim is an epidemiologist and associate scientist with the University of Wisconsin-Milwaukee, Center for Urban Population Health.

The Center for Urban Population Health is a partnership of Aurora Health Care/Aurora Research Institute, LLC, the University of Wisconsin-Milwaukee, and the University of Wisconsin School of Medicine and Public Health.

Support for this report was provided by the Wisconsin Department of Health Services, Division of Public Health, Bureau of Community Health Promotion, Tobacco Prevention and Control Program.

Suggested citation: Palmersheim KA. *Wisconsin Tobacco Facts: Mental and Behavioral Health (April 2022)*. Milwaukee, WI: University of Wisconsin-Milwaukee, Center for Urban Population Health; 2022 (April).

PREFACE

Wisconsin has worked hard to reduce the consumption of tobacco, especially cigarettes, in hopes of reducing the incredible burden it has placed on individuals, families, and communities. Yet, 16% of Wisconsin adults reported being cigarette smokers in 2020. This report presents the most recently available data from the Wisconsin Behavioral Risk Factor Survey (BRFS) examining how tobacco use among Wisconsin adults may be associated with various aspects of mental health, socio-emotional health, health risk behaviors, and health care utilization.

Data are from the Wisconsin Behavioral Risk Factor Surveillance System. The Behavioral Risk Factor Surveillance System, conducted in all 50 states, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and Guam, is the world's largest, on-going telephone health survey system, tracking health conditions and risk behaviors in the United States. Wisconsin has participated in the survey since its inception in 1984.

The Behavioral Risk Factor Survey is a cross-sectional survey. Thus, the findings presented from its data represent a snapshot of the state's adult population each year it is conducted. Accordingly, the data cannot elucidate cause and effect, but rather reveal correlations between the factors examined. Though correlation does not imply causation, correlations reveal important characteristics and patterns that are crucial to understanding tobacco-related behavior.

The findings presented here are intended to provide a resource for state and local health departments, health professionals, educators, and local coalitions working to reduce tobacco consumption and the associated cost in Wisconsin. This report may also assist public health agencies assess progress made toward the reduction of tobacco use and exposure among adults, and further aid them in determining the focus of future programmatic efforts.

Analysis were conducted using SPSS, v. 25. Data were weighted to be representative of the state population from which they were drawn.

TABLE OF CONTENTS

Acknowledgements	i
Preface	i
Table of Contents	ii
Key Findings	1
Section A. Mental Health and Smoking	A1
Figure A.1. Number of Poor Mental Health Days During the Past 30 Days, by Current Cigarette Smoking Status, Adults, Wisconsin, 2020.....	A1
Figure A.2. Percent Ever Diagnosed with Depression, by Current Cigarette Smoking Status, Adults, Wisconsin, 2020	A2
Figure A.3. Percent of Current Smokers that Made a Quit Attempt During the Past Year, by Ever Diagnosed with Depression, Adults, Wisconsin, 2020.....	A3
Figure A.4. Percent Who Experienced Suicidal Thoughts During the Past Year, by Current Cigarette Smoking Status, Adults, Wisconsin, 2019-2020.....	A4
Section B. Socio-Emotional Health and Smoking	B1
Figure B.1. Number of Adverse Childhood Events (ACEs), by Current Cigarette Smoking Status, Adults, Wisconsin, 2020	B1
Figure B.2. Prevalence of Current Cigarette Smoking, by Number of Adverse Childhood Events (ACEs), Adults, Wisconsin, 2020.....	B2
Figure B.3. How Often Worried About Paying Rent or Mortgage During the Past 12 Months, by Current Cigarette Smoking Status, Adults, Wisconsin, 2020	B3
Figure B.4. Perceived Level of Social and Emotional Support, by Current Cigarette Smoking Status, Adults, Wisconsin, 2020.....	B4
Figure B.5. Life Satisfaction, by Current Cigarette Smoking Status, Adults, Wisconsin, 2020.....	B5
Section C. Health Risk Behaviors and Smoking	C1
Figure C.1. Binge Drinking and Heavy Drinking, by Current Cigarette Smoking Status, Adults, Wisconsin, 2020	C1
Figure C.2. Prevalence of Marijuana Use During the Past 30 Days, by Current Cigarette Smoking Status, Adults, Wisconsin, 2020.....	C2
Figure C.3. Seatbelt Use, by Current Cigarette Smoking Status, Adults, Wisconsin, 2020.....	C3
Section D. Health Care Utilization and Smoking	D1
Figure D.1. Length of Time Since Last Routine Health Checkup, by Current Cigarette Smoking Status, Adults, Wisconsin, 2020.....	D1
Figure D.2. Percent Receiving Any Kind of Health Care in Past 12 Months, by Current Cigarette Smoking Status, Adults, Wisconsin, 2020.....	D2
Figure D.3. Percent Receiving Any Mental Health Care in Past 12 Months, by Current Cigarette Smoking Status, Adults, Wisconsin, 2020.....	D3



TABLE OF CONTENTS __ CONTINUED

Figure D.4. Percent Taking Medication or Receiving Treatment for Mental Health Condition or Emotional Problem, by Current Cigarette Smoking Status, Adults, Wisconsin, 2020.....	D4
Figure D.5. Length of Time Since Last Dental Visit, by Current Cigarette Smoking Status, Adults, Wisconsin, 2020	D5
Section E. Data Sources	E1

KEY FINDINGS

Mental Health and Smoking

- Compared to non-smokers, smokers were more likely to experience poor mental health days in Wisconsin in 2020. In particular, smokers were twice as likely to report having 14-30 poor mental health days during the past 30 days, compared to non-smokers (23% vs 10%).
- Smokers (28%) were more likely to report ever having been diagnosed with depression than non-smokers (19%).
- Amongst current smokers, those who had never been diagnosed with depression were slightly more likely make a quit attempt during the previous 12 months than those who had been diagnosed with depression (53% vs 50%).
- Smokers (11%) were more than two and one-half times more likely to report having experienced suicidal thoughts during the past year than non-smokers (4%).

Socio-Emotional Health and Smoking

- Current smokers reported having experienced a greater number of adverse childhood events than non-smokers. For example, smokers were twice as likely to report having experienced 4 to 8 adverse childhood than non-smokers (28% vs 14%).
- The within group prevalence of current smoking increases with each increasing level of exposure to adverse childhood events.
- Current smokers were more likely to worry about paying their rent or mortgage than non-smokers. Fifty-one percent of smokers experienced some level of worry during the previous 12 months, compared to 32% of non-smokers.
- Compared to non-smokers, current smokers perceived having lower levels of needed social and emotional support. For example, 15% of smokers felt they rarely or never received the support they needed, in comparison to 7% of non-smokers.
- Current smokers expressed lower levels of life satisfaction than non-smokers. While 47% of non-smokers reported being very satisfied with life, 31% of smokers reported being very satisfied.

Health Risk Behaviors and Smoking

- Current smokers were more likely to report binge drinking behavior (39%) and heavy drinking (21%) than non-smokers (20% and 8%, respectively).
- Current smokers were more likely to report using marijuana than non-smokers (29% vs 9%, respectively).
- Non-smokers (88%) were more likely to report always using a seatbelt while driving or riding in a car compared to smokers (76%). At the other end of the spectrum, smokers were three times more likely to report seldom or never use of seatbelts than non-smokers (10% vs 3%).

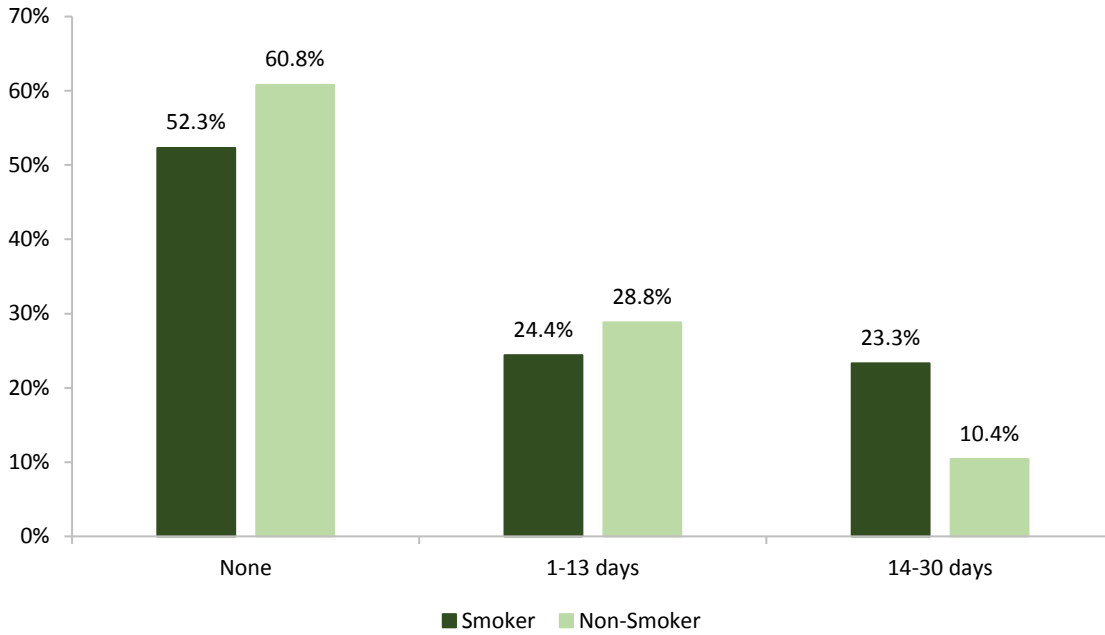
Health Care Utilization and Smoking

- Non-smokers (76%) were more likely to report having a routine health checkup within the past year compared to smokers (63%). In addition, smokers were twice as likely to report not having a health checkup in five years or more, or never, when compared to non-smokers (11% vs 5%).
- Smokers were less likely to report receiving any kind of health care during the past 12 months compared to non-smokers (57% vs 71%).
- Smokers were more likely to report receiving any kind of mental health care during the past 12 months compared to non-smokers (20% vs 14%).
- Smokers were more likely to report taking medicine or receiving treatment for a mental health condition or emotional problem at the time of interview compared to non-smokers (18% vs 15%).
- Non-smokers (75%) were more likely to report having a dental visit within the past year compared to smokers (56%). In addition, smokers were three times more likely to report not having a dental visit in five years or more, or never, when compared to non-smokers (18% vs 6%).



SECTION A. MENTAL HEALTH AND SMOKING

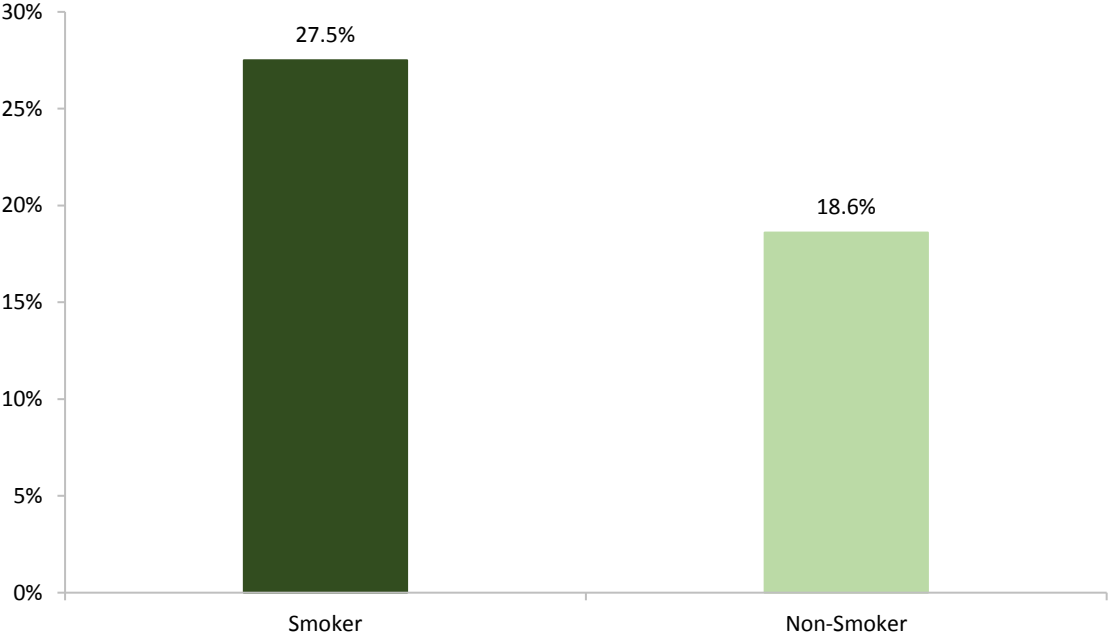
Figure A.1. Number of Poor Mental Health Days* During the Past 30 Days, by Current Cigarette Smoking Status, Adults, Wisconsin, 2020



* The number of poor mental health days was assessed with the following question: Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?

Data: Wisconsin Behavioral Risk Factor Survey

Figure A.2. Percent Ever Diagnosed with Depression*, by Current Cigarette Smoking Status, Adults, Wisconsin, 2020

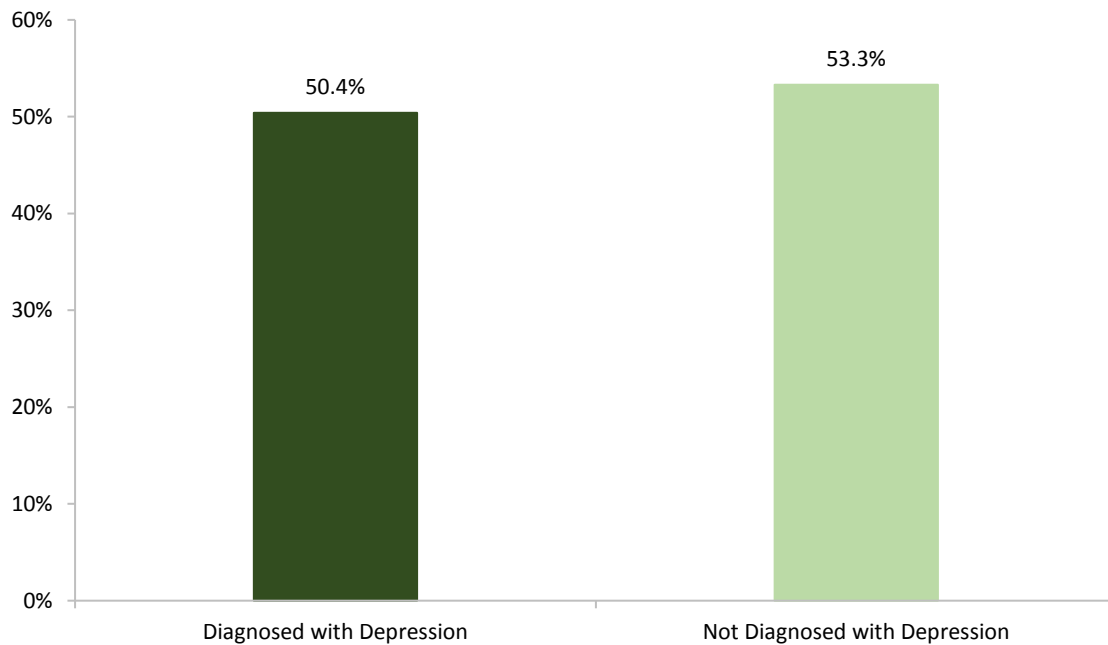


* Ever diagnosed with depression was assessed with the following question: Has a doctor, nurse, or other health professional ever told you that you have a depressive disorder, including depression, major depression, dysthymia, or minor depression?

Data: Wisconsin Behavioral Risk Factor Survey



Figure A.3. Percent of Current Smokers that Made a Quit Attempt During the Past Year*, by Ever Diagnosed with Depression†, Adults, Wisconsin, 2020

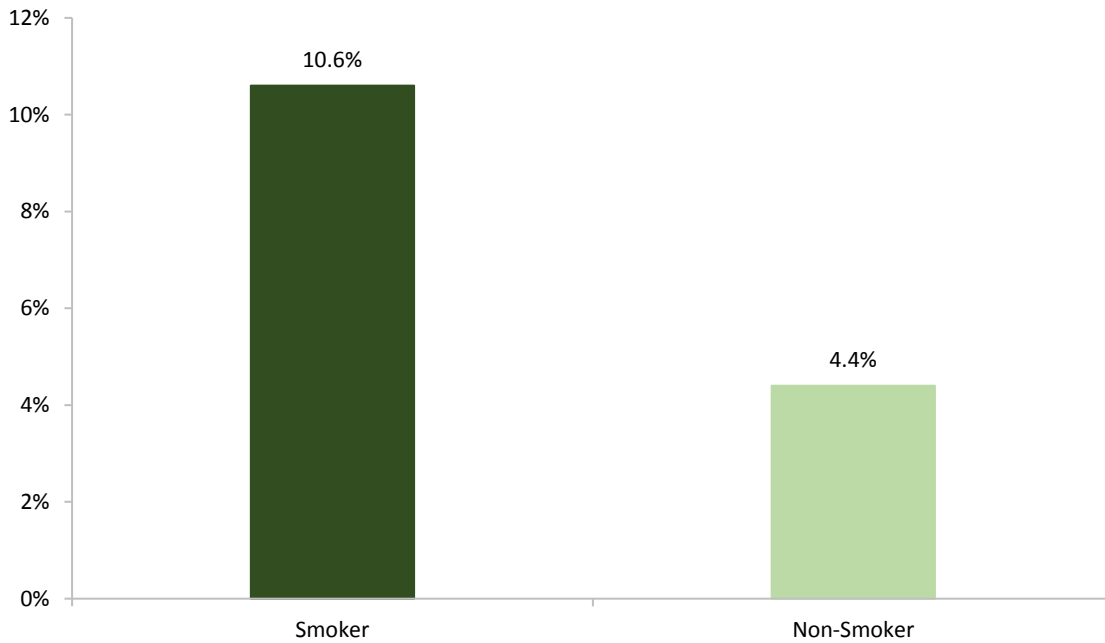


* Quit attempt during the past year was assessed with the following question: During the past 12 months, have you stopped smoking for one day or longer because you were trying to quit smoking? (question was only asked of current smokers)

† Ever diagnosed with depression was assessed with the following question: Has a doctor, nurse, or other health professional ever told you that you have a depressive disorder, including depression, major depression, dysthymia, or minor depression?

Data: Wisconsin Behavioral Risk Factor Survey

Figure A.4. Percent Who Experienced Suicidal Thoughts During the Past Year*, by Current Cigarette Smoking Status, Adults, Wisconsin, 2019-2020



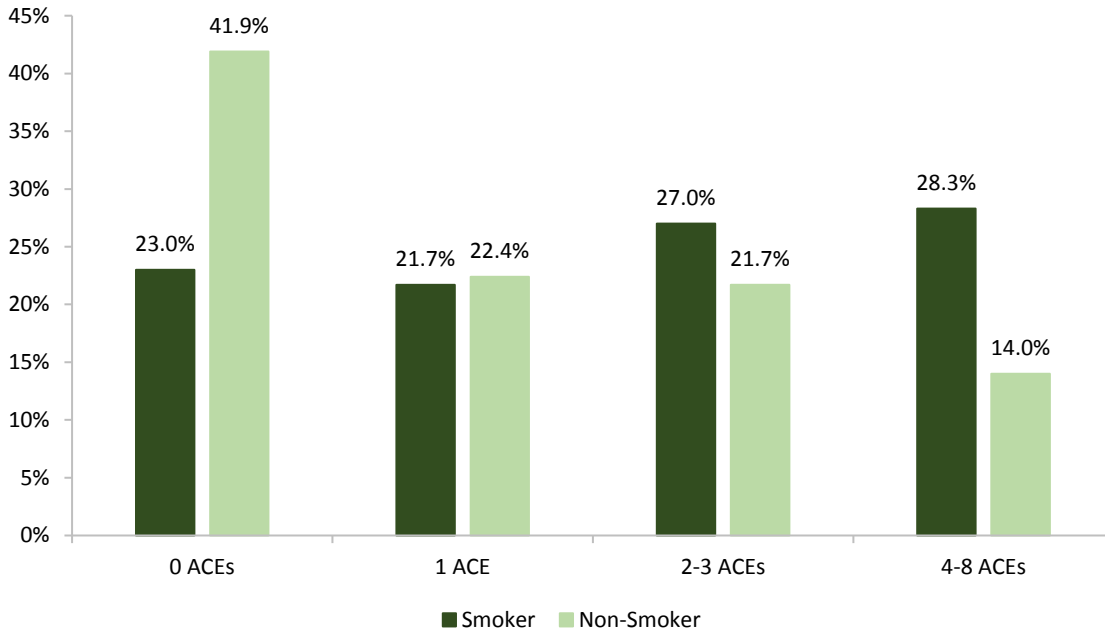
* Experienced suicidal thoughts during the past year was assessed with the following question: In the past year, have you ever seriously thought about attempting suicide?

† Due to a relatively small number of people reporting having suicidal thoughts, two years of data were merged to increase the sample size, thereby improving the reliability of the estimates.

Data: Wisconsin Behavioral Risk Factor Survey

SECTION B. SOCIO-EMOTIONAL HEALTH AND SMOKING

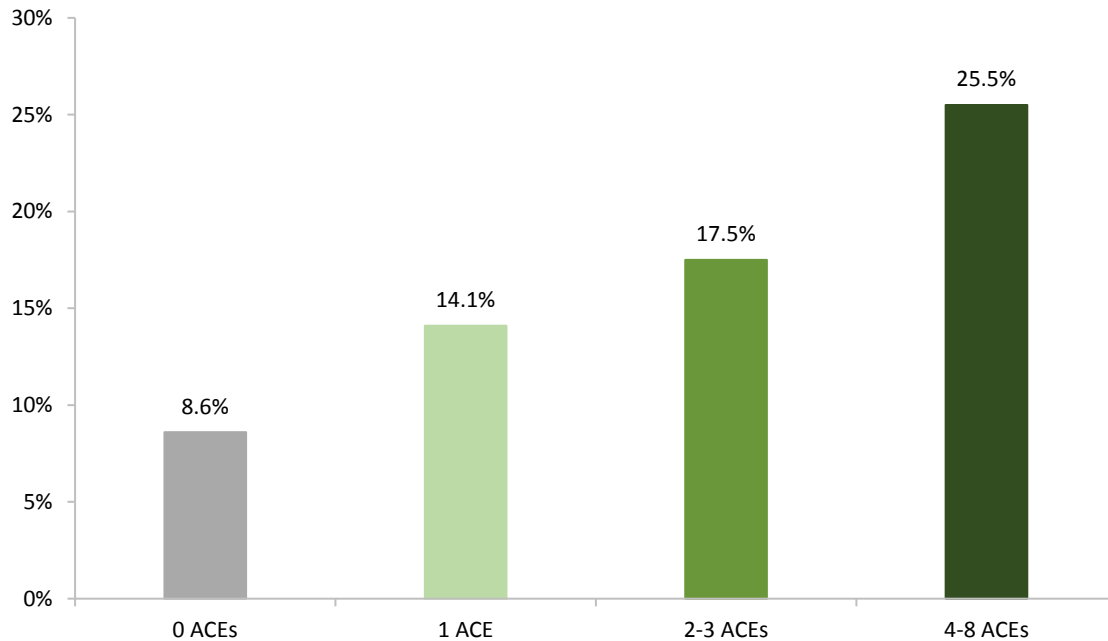
Figure B.1. Number of Adverse Childhood Events (ACEs)*, by Current Cigarette Smoking Status, Adults, Wisconsin, 2020



* The number of adverse childhood events (ACEs) was assessed by constructing an index (scores ranging from 0 to 8) from a series of 11 questions, which referred to the time period before the survey respondent was 18 years of age: Now looking back, before you were 18 years of age... (1) Did you live with anyone who was depressed, mentally ill or suicidal? (2) Did you live with anyone who was a problem drinker or alcoholic? (3) Did you live with anyone who used illegal street drugs or who abused prescription medications? (4) Did you live with anyone who served time or was sentenced to serve time in a prison, jail or other correctional facility? (5) Were your parents separated or divorced? (6) How often did your parents or adults in your home ever slap, hit, kick, punch or beat each other up? (7) How often did a parent or other adult in your home ever hit, beat, kick, or physically hurt you in any way? Do not include spanking. (8) How often did a parent or adult in your home ever swear at you, insult you or put you down? (9) How often did anyone at least 5 years older than you, or an adult, touch you sexually? (10) How often did anyone at least 5 years older than you, or an adult, try to make you touch them sexually? (11) How often did anyone at least 5 years older than you, or an adult, force you to have sex?

Data: Wisconsin Behavioral Risk Factor Survey

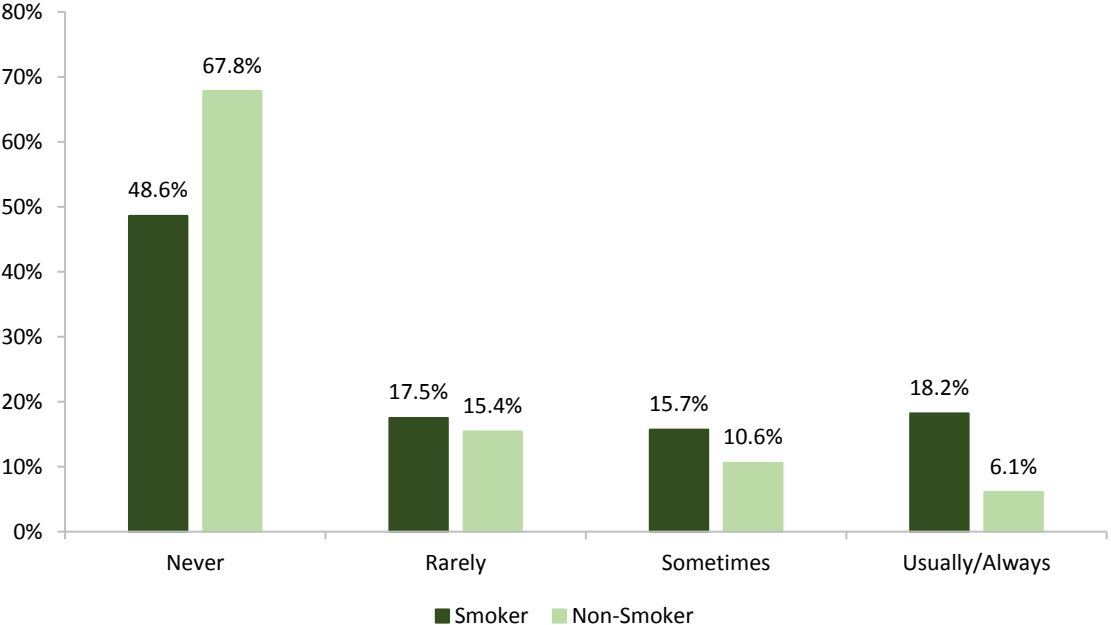
Figure B.2. Prevalence of Current Cigarette Smoking, by Number of Adverse Childhood Events (ACEs)*, Adults, Wisconsin, 2020



* The number of adverse childhood events (ACEs) was assessed by constructing an index (scores ranging from 0 to 8) from a series of 11 questions, which referred to the time period before the survey respondent was 18 years of age: Now looking back, before you were 18 years of age... (1) Did you live with anyone who was depressed, mentally ill or suicidal? (2) Did you live with anyone who was a problem drinker or alcoholic? (3) Did you live with anyone who used illegal street drugs or who abused prescription medications? (4) Did you live with anyone who served time or was sentenced to serve time in a prison, jail or other correctional facility? (5) Were your parents separated or divorced? (6) How often did your parents or adults in your home ever slap, hit, kick, punch or beat each other up? (7) How often did a parent or other adult in your home ever hit, beat, kick, or physically hurt you in any way? Do not include spanking. (8) How often did a parent or adult in your home ever swear at you, insult you or put you down? (9) How often did anyone at least 5 years older than you, or an adult, touch you sexually? (10) How often did anyone at least 5 years older than you, or an adult, try to make you touch them sexually? (11) How often did anyone at least 5 years older than you, or an adult, force you to have sex?

Data: Wisconsin Behavioral Risk Factor Survey

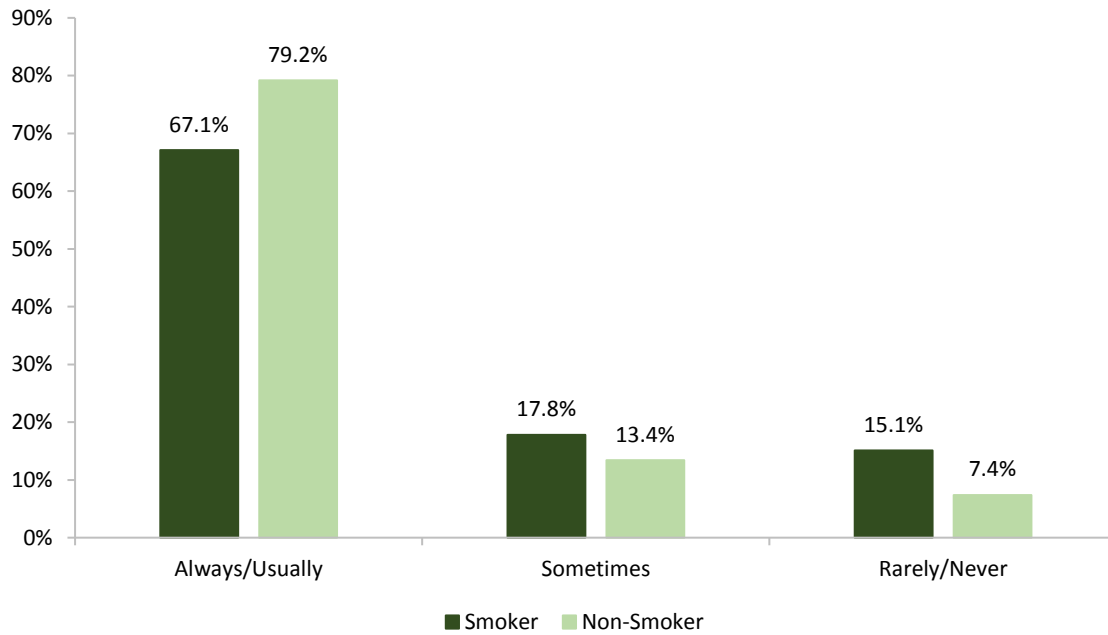
Figure B.3. How Often Worried About Paying Rent or Mortgage During the Past 12 months*, by Current Cigarette Smoking Status, Adults, Wisconsin, 2020



* Worry about paying rent or mortgage was assessed with the following question: How often in the past 12 months would you say you were worried or stressed about having enough money to pay your rent or mortgage? Would you say: always, usually, sometimes, rarely, or never?

Data: Wisconsin Behavioral Risk Factor Survey

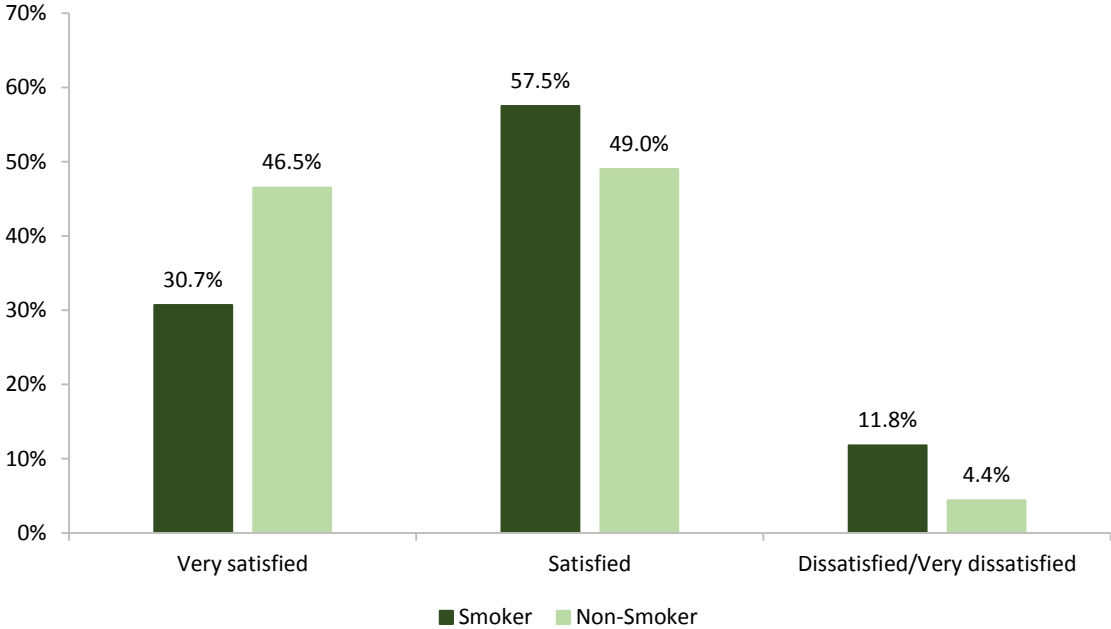
Figure B.4. Perceived Level of Social and Emotional Support*, by Current Cigarette Smoking Status, Adults, Wisconsin, 2020



* Perceived level of social and emotional support was assessed with the following question: How often do you get the social and emotional support you need? Would you say always, usually, sometimes, rarely, or never?

Data: Wisconsin Behavioral Risk Factor Survey

Figure B.5. Life Satisfaction*, by Current Cigarette Smoking Status, Adults, Wisconsin, 2020

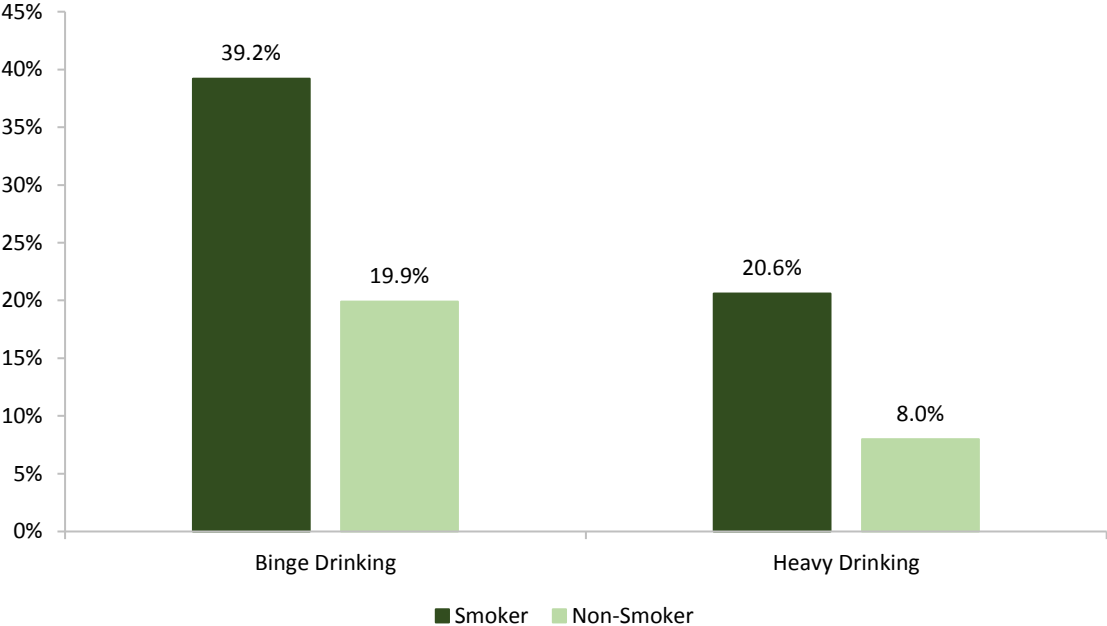


* Life satisfaction was assessed with the following question: In general, how satisfied are you with your life? Would you say very satisfied, satisfied, dissatisfied, or very dissatisfied?

Data: Wisconsin Behavioral Risk Factor Survey

SECTION C. HEALTH RISK BEHAVIORS AND SMOKING

Figure C.1. Binge Drinking* and Heavy Drinking†, by Current Cigarette Smoking Status, Adults, Wisconsin, 2020

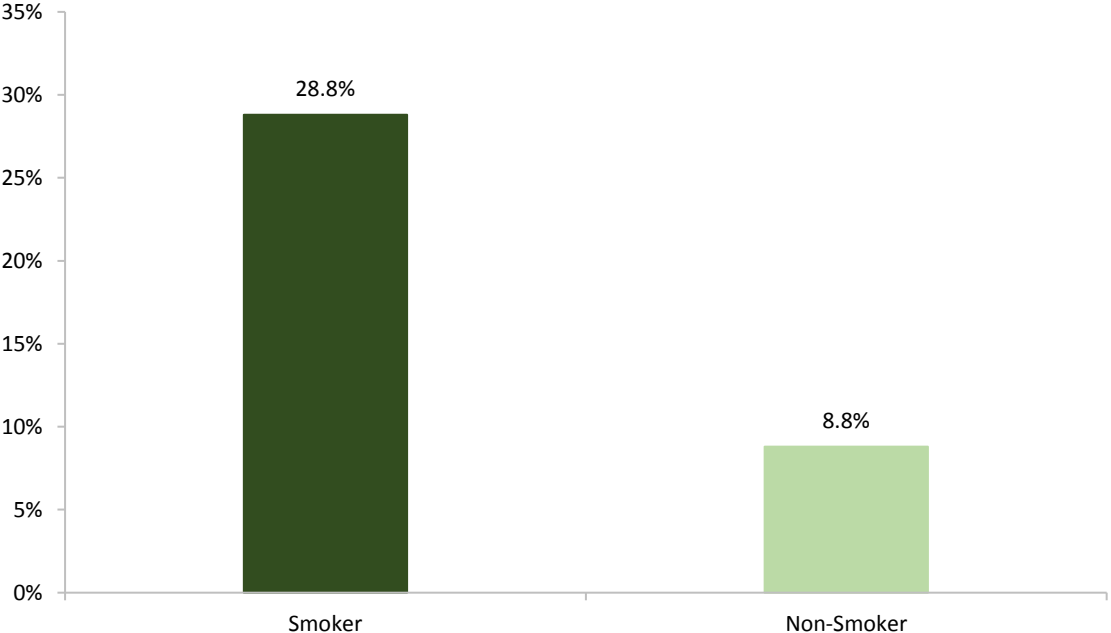


* Binge drinking was defined as: Males having five or more drinks on one or more occasions during the past 30 days, females having four or more drinks on one or more occasions during the past 30 days.

† Heavy drinking was defined as: Males having more than 14 drinks per week, females having more than 7 drinks per week.

Data: Wisconsin Behavioral Risk Factor Survey

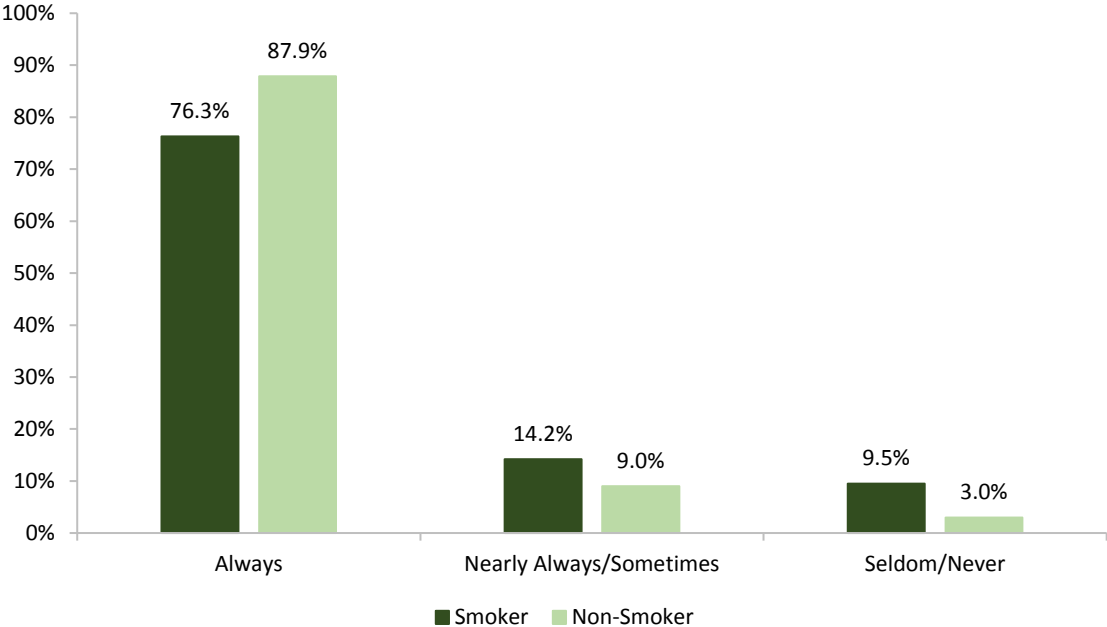
Figure C.2. Prevalence of Marijuana Use During the Past 30 Days*, by Current Cigarette Smoking Status, Adults, Wisconsin, 2020



* Marijuana use during the past 30 days was assessed with the following question: During the past 30 days, on how many days did you use marijuana or cannabis?

Data: Wisconsin Behavioral Risk Factor Survey

Figure C.3. Seatbelt Use*, by Current Cigarette Smoking Status, Adults, Wisconsin, 2020

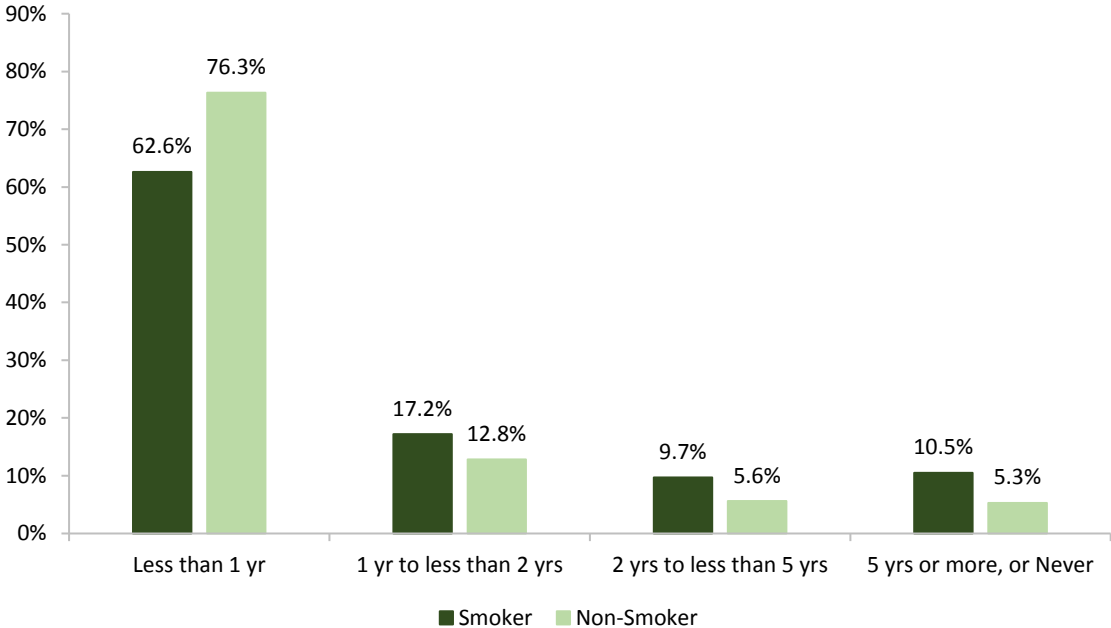


* Seatbelt use was assessed with the following question: How often do you use seat belts when you drive or ride in a car? Would you say— Always, Nearly always, Sometimes, Seldom, or Never.

Data: Wisconsin Behavioral Risk Factor Survey

SECTION D. HEALTH CARE UTILIZATION AND SMOKING

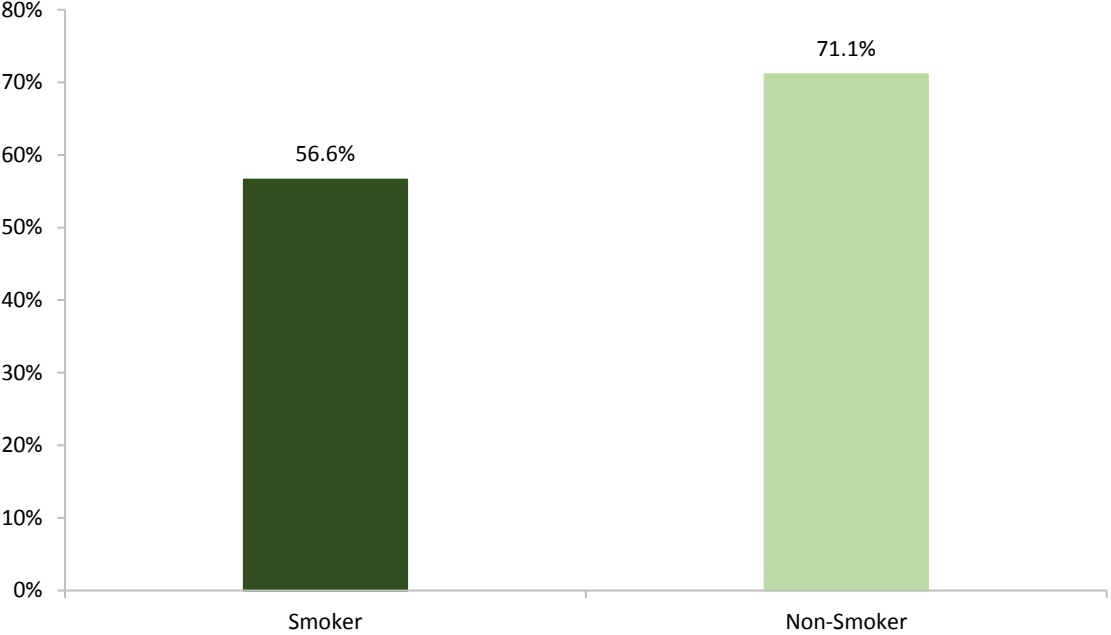
Figure D.1. Length of Time Since Last Routine Health Checkup*, by Current Cigarette Smoking Status, Adults, Wisconsin, 2020



* Length of time since last routine checkup was assessed with the following question: About how long has it been since you last visited a doctor for a routine checkup? [A routine checkup is a general physical exam, not an exam for a specific injury, illness, or condition.]

Data: Wisconsin Behavioral Risk Factor Survey

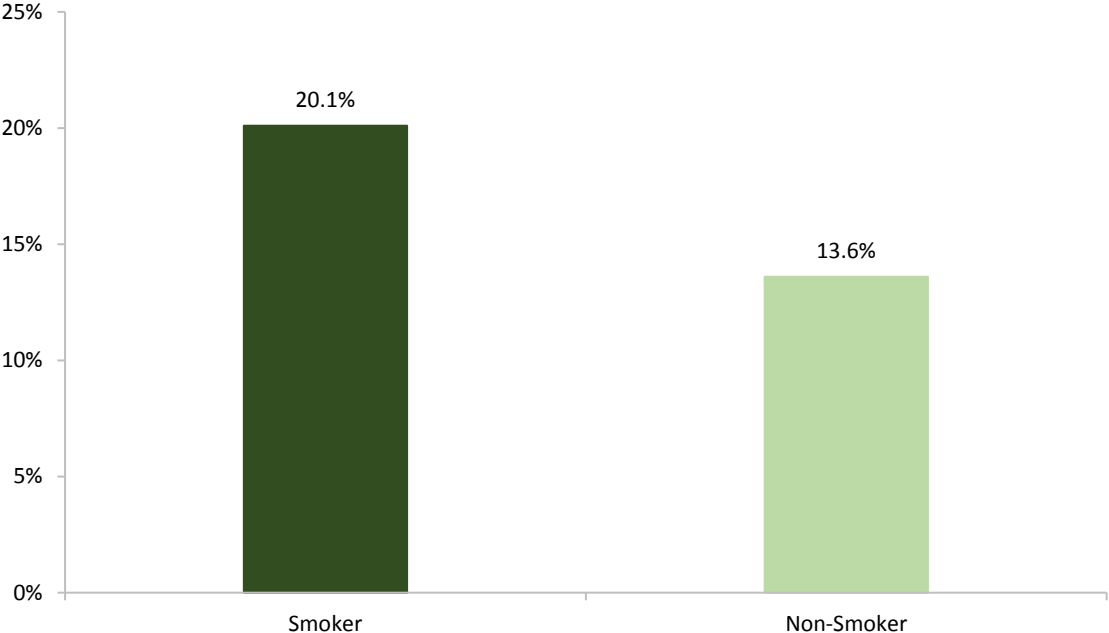
Figure D.2. Percent Receiving Any Kind of Health Care in Past 12 Months*, by Current Cigarette Smoking Status, Adults, Wisconsin, 2020



* Any health care in the past 12 months was assessed with the following question: In the past 12 months have you seen a doctor, nurse or other healthcare professional to get any kind of care for yourself?

Data: Wisconsin Behavioral Risk Factor Survey

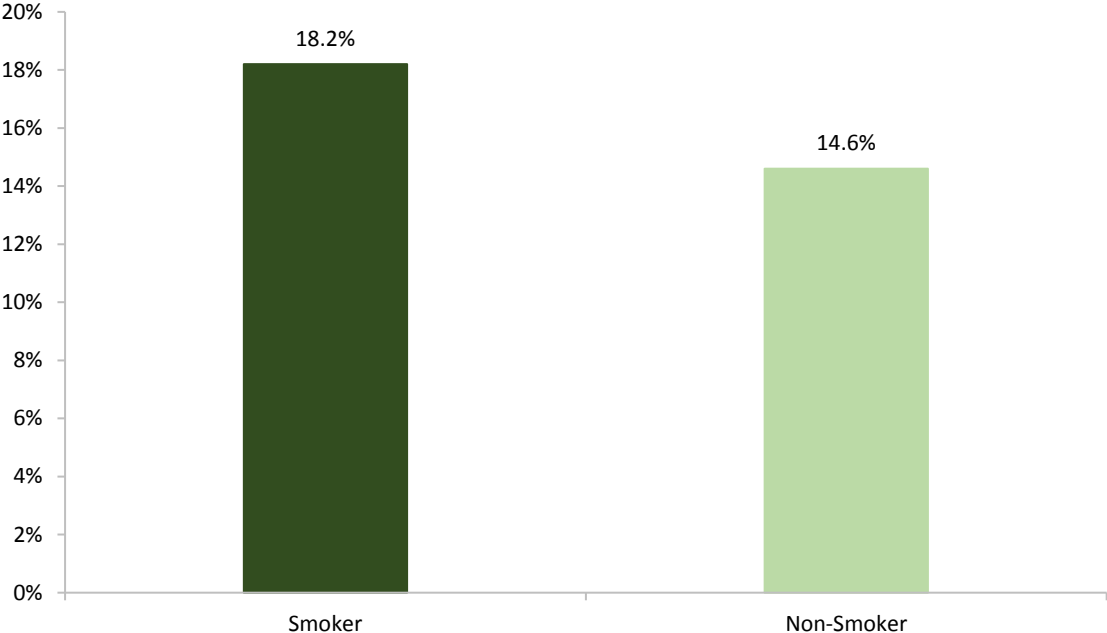
Figure D.3. Percent Receiving Any Mental Health Care in Past 12 Months*, by Current Cigarette Smoking Status, Adults, Wisconsin, 2020



* Any mental health care in the past 12 months was assessed with the following question: In the past 12 months, have you seen a healthcare professional for mental health treatment or counseling?

Data: Wisconsin Behavioral Risk Factor Survey

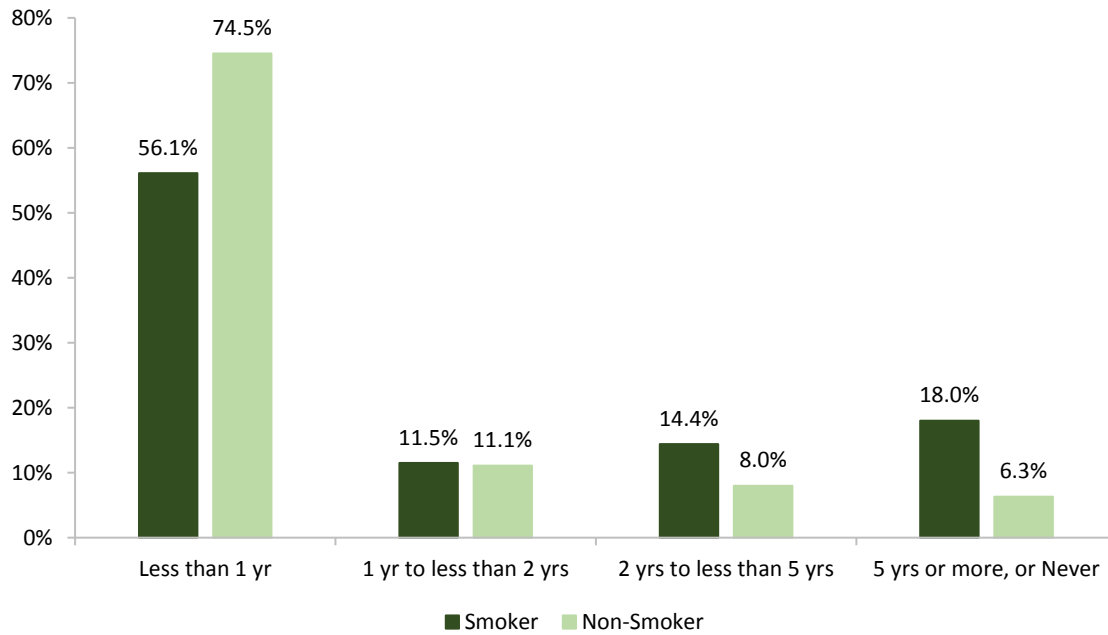
Figure D.4. Percent Taking Medicine or Receiving Treatment for Mental Health Condition or Emotional Problem*, by Current Cigarette Smoking Status, Adults, Wisconsin, 2020



* Taking medication or receiving mental health treatment was assessed with the following question: Are you now taking medicine or receiving treatment from a doctor or other health professional for any type of mental health condition or emotional problem?

Data: Wisconsin Behavioral Risk Factor Survey

Figure D.5. Length of Time Since Last Dental Visit*, by Current Cigarette Smoking Status, Adults, Wisconsin, 2020



* Length of time since last dental visit was assessed with the following question: Including all types of dentists, such as orthodontists, oral surgeons, and all other dental specialists, as well as dental hygienists, how long has it been since you last visited a dentist or a dental clinic for any reason?

Data: Wisconsin Behavioral Risk Factor Survey

SECTION E. DATA SOURCES

Wisconsin Behavioral Risk Factor Survey. All the data used in this report are from the Wisconsin Behavioral Risk Factor Survey (BRFS). The survey is conducted by the Wisconsin Department of Health Services, Division of Public Health, Office of Health Informatics. At the national level, the Behavioral Risk Factor Surveillance System is overseen by the Centers for Disease Control and Prevention. The corresponding survey is conducted in all 50 states, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and Guam. It is the world's largest, on-going telephone health survey system, tracking health conditions and risk behaviors in the United States. Wisconsin has participated in the survey since its inception in 1984.

