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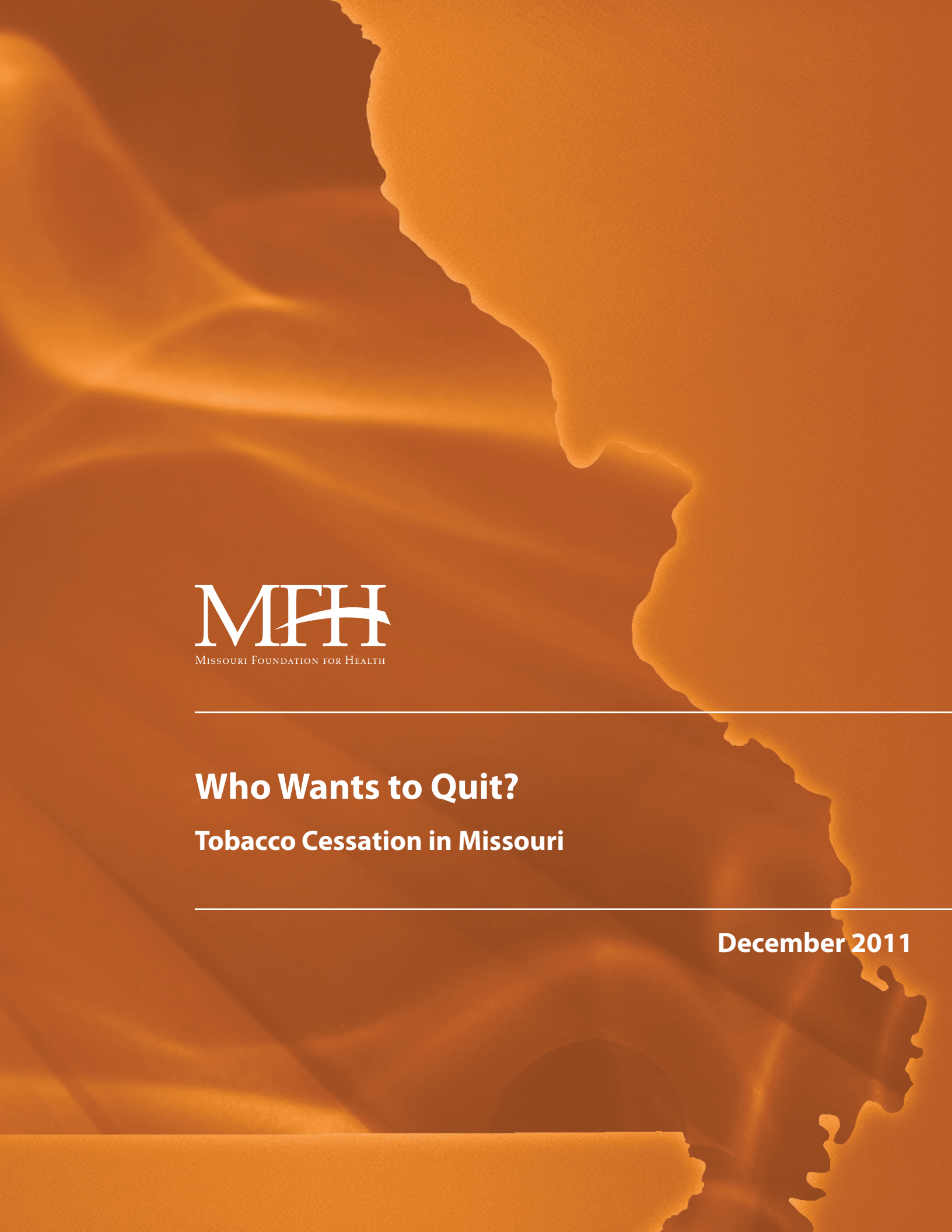
Who Wants to Quit? Tobacco Cessation in Missouri

Center for Public Health Systems Science

Jill Kuhlberg

Amy Sorg

Sarah Shelton



MFH
Missouri Foundation for Health

Who Wants to Quit?

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Prepared for

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Prepared by

Jill Kuhlberg
Amy Sorg
Sarah Shelton
Douglas Luke
Center for Tobacco Policy Research
George Warren Brown School of Social Work
Washington University in St. Louis

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Preface

In 2003, the Missouri Department of Health and Senior Services (MDHSS) conducted a study to collect county-specific data on tobacco use and chronic disease prevalence. It proved a valuable resource for public health professionals by providing more regionally focused data; however, the sample size of 15,000 Missouri adults limited effective analysis at the county level for many counties.

To address the need for updated and more comprehensive county-level data, and to establish baseline measures for the Tobacco Prevention and Cessation Initiative (TPCI), the Missouri Foundation for Health (MFH) partnered with MDHSS in 2007 to expand on the previous data collection activities. Specifically, MFH and MDHSS aimed to determine county-level prevalence of behavioral risk factors, chronic diseases and conditions, and preventive practices among adults age 18 and older in Missouri.

The resulting 2007 County-level Study (CLS) was implemented by the University of Missouri's Health and Behavioral Risk Research Center, which conducted telephone interviews with Missouri adults between February 2007 and April 2008. The 2007 CLS resulted in 49,513 completed interviews.

Summary results of the 2007 CLS, as well as comparisons to the 2003 data, are available at http://health.mo.gov/data/CommunityDataProfiles. Information regarding the design and methodology of the 2007 CLS is available at http://health.mo.gov/data/cls/designmethodology.php.

2007 Missouri County-level Study Report Series

The Center for Tobacco Policy Research (CTPR) at Washington University in St. Louis conducted further analyses of the 2007 CLS data to explore specific topics in greater depth. This report, "Who Wants to Quit?", is the fourth in a series that describes the results of CTPR's analyses. These reports will be disseminated to tobacco control stakeholders throughout Missouri to support programmatic efforts and inform strategic planning of tobacco control activities. The reports are available at http://ctpr.wustl.edu/reports. "Who Wants to Quit?" examines Missouri smokers' efforts and intentions to quit smoking, their utilization of evidence-based treatment, and their awareness of available cessation resources.

Introduction

Importance of Smoking Cessation to Public Health

The health consequences of smoking and other tobacco use are well documented. Tobacco use has been linked to nicotine dependence, various types of cancers, heart attacks, strokes, impotence, low birth weight in children born to mothers who smoke or are exposed to secondhand smoke, and even premature death.[1] Smoking cessation can reduce the risk of developing these harmful health conditions and restore former smokers to a healthier life, no matter how long they have been smoking.[2] However, smoking cessation is a complex process, as most smokers cycle through various attempts to quit before successfully quitting.

While several personal factors can influence an individual's decision to quit, including their level of nicotine dependence and social support, many other external factors may have impacted how many of these smokers ultimately quit. Brief physician advice, FDA-approved medications, and counseling improve a smoker's chances of long-term cessation success.[4] In addition, population-based policies such as tobacco tax increases and smokefree policies increase current smokers' motivation for quitting.[4] Experts also note that to achieve maximum public health benefits, access to evidence-based tobacco dependence treatments should be increased during and following the implementation of these policies.[4]

Report Overview

This report provides information on tobacco use cessation in Missouri. Using data collected in 2007 from the Missouri County-level Study, sections of this report include analyses that examine:

- Cessation Attempts and Successes
- Cessation Methods
- Cessation Resources and Assistance
- External Influences to Quit

Any reported disparities across demographic, socioeconomic, or personal characteristics are highlighted in their corresponding sections and further detailed in the report appendices.

How Report Can Be Used

This report highlights both groups that are in need of cessation assistance and opportunities for more effective interventions in the health care services sector. Report findings and their associated recommendations may be used by the tobacco control community to inform their planning and programmatic efforts.

Missouri Smokers and Their Efforts to Quit

Characteristics of Missouri Smokers

In 2007, 23% of adult Missourians were current cigarette smokers. There were marked differences in smoking prevalence in terms of several sociodemographic characteristics. Similar to national statistics, smoking prevalence was highest for individuals with lower education and income levels. In addition, current smoking prevalence was higher among Medicaid recipients (48%) and uninsured Missourians (40%) compared with all other insurance groups (*i.e.*, private insurance holders, Medicare beneficiaries, people with other government insurance).

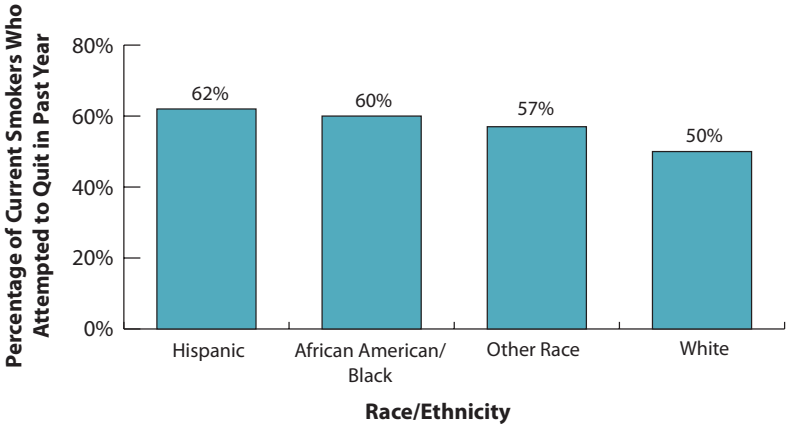
Former Missouri Smokers

In Missouri, there are more former smokers than current smokers. Among former smokers, more than half (59%) have not smoked regularly for more than 10 years. Ten percent of the respondents reported that they recently stopped smoking (within the past year). Among those who recently stopped within the past year of the survey administration, 39% had not smoked regularly for over 6 months, and 15% reported they had stopped in the past month.

Previous Efforts to Quit

Just over half (51%) of all current smokers tried at least once in the past year to stop smoking, but were unsuccessful. Quit efforts varied by several sociodemographic variables. Among current smokers, more Medicaid recipients and low-income residents reported that they attempted to quit in the last year (60% and 56%, respectively) compared with participants in other insurance and income groups. Fewer White respondents reported a quit attempt (50%) compared to African Americans (60%), Hispanics (62%) and those from other racial/ethnic groups (57%). (For more information see Appendix A.)

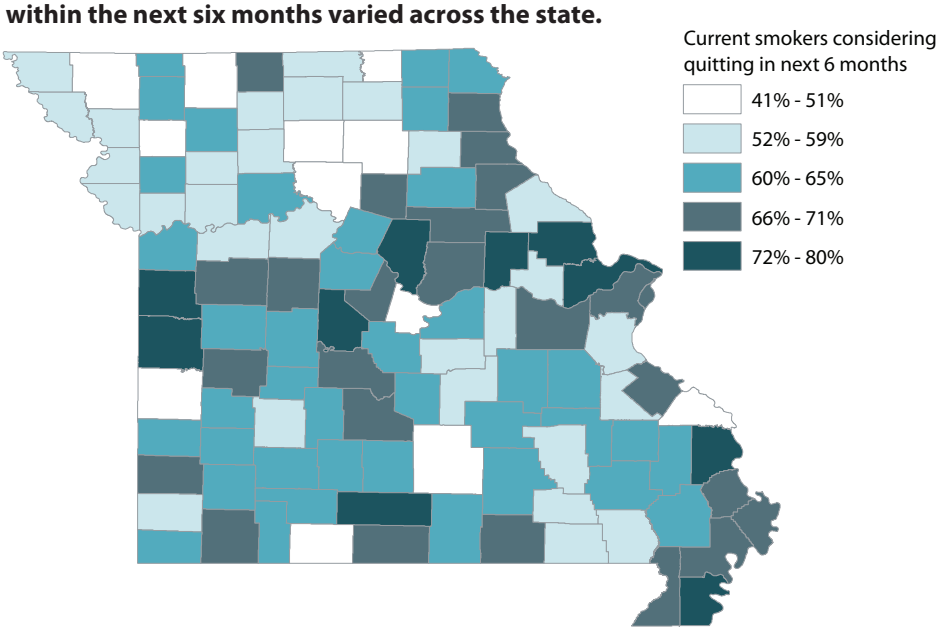
Figure 1: Fewer White respondents reported a quit attempt in the past year compared with respondents from other racial/ethnic groups.



Intentions to Quit

Among current Missouri smokers in 2007, 64% reported that they were seriously considering stopping smoking within the next six months. More African American respondents reported they intended to quit (73%) than any other racial/ethnic group. (For more information see Appendix A.) Intentions varied throughout the state, with a lower percentage of smokers considering quitting in the northeast and northwest regions of the state (Figure 2).

Figure 2: The percentage of current smokers considering quitting within the next six months varied across the state.



Confidence to Quit

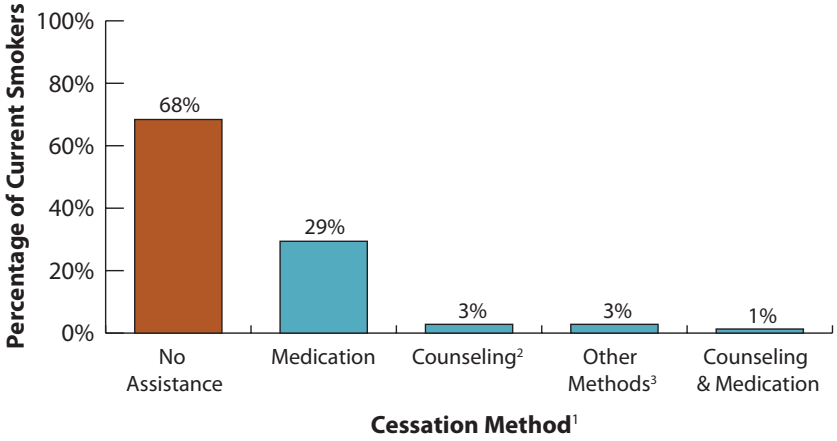
A smoker's self-efficacy, or confidence in his or her ability to quit, is associated with higher long-term abstinence rates.[4] Although more than half of current smokers reported an unsuccessful attempt to quit in the past year, 79% reported believing they could successfully quit. This percentage varied across certain sociodemographic characteristics. For example, the percentage of respondents who believed they would be able to quit increased with income and education level. People living in urban areas also reported higher levels of confidence to quit compared with rural areas of the state (85% and 78%, respectively). African American and Hispanic respondents reported more confidence in their abilities to stop smoking than White or other racial/ethnic groups. Finally, more Missourians with private insurance believed they would be successful in a quit attempt compared to Missourians with other types of coverage. (For more information see Appendix A.)

Cessation Methods

Studies indicate that only 3-5% of smokers who attempt to quit without assistance are able to remain abstinent for six months.[5] Several evidence-based treatments increase a smoker's chance of quitting.[4] Group, individual, and telephone quitline counseling all increase cessation success. Several FDA-approved medications also increase abstinence rates. In addition, evidence indicates the combination of counseling and medication significantly improves the success of quitting versus using either method alone. Current evidence shows that other cessation methods, such as hypnosis, acupuncture and the use of untailored self-help materials, do not significantly improve quit rates.[4]

In 2007, utilization of evidence-based cessation treatments was low in Missouri (Figure 3). Among Missouri smokers who made a quit attempt in the previous year, 29% used medication, 3% used some form of counseling assistance, 3% used other methods (*i.e.*, acupuncture, hypnosis, self-help materials), and just over 1% used medication in conjunction with counseling. The majority (68%) did not use any type of assistance.

Figure 3: The majority of current smokers who made a quit attempt in the previous year did not use any type of assistance.



[1] Cessation method categories are not mutually exclusive.
[2] Includes Group Classes, Individual Counseling, and Quitline Assistance
[3] Includes Acupuncture, Hypnosis, and Self-help Materials

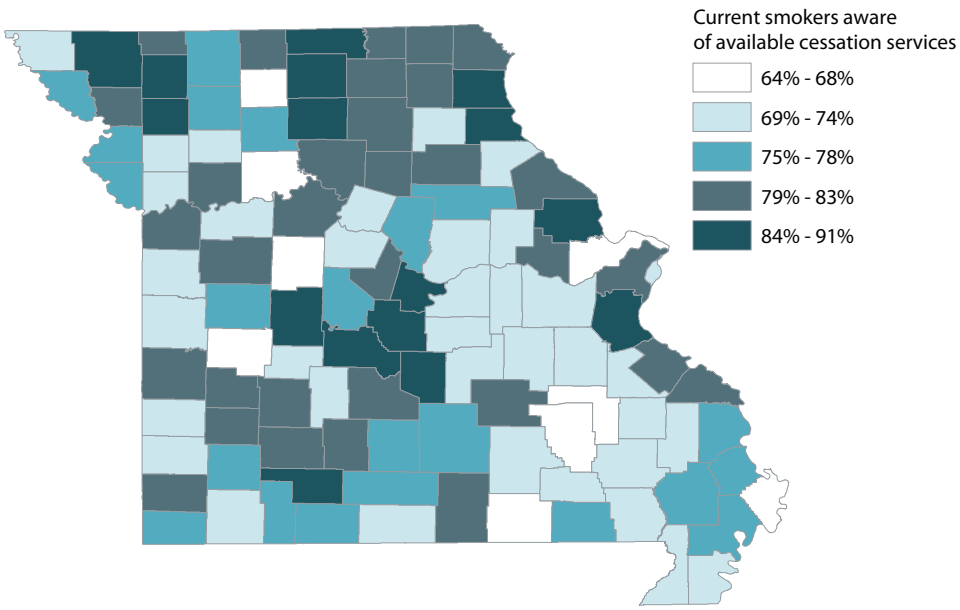
Cessation Assistance and Resources

Awareness of Resources

The availability of cessation assistance resources and services offered by communities varies across Missouri. However, some cessation services are widely available. The Missouri Quitline, for example, is available to any Missouri smoker with a telephone wanting to quit. Missouri smokers were surveyed about their awareness of cessation assistance services available to them like the Quitline and other services offered in their communities or by their employers.

Nearly 1 in 4 smokers reported that they were unaware of any assistance to help them quit (*e.g.*, telephone quitlines, local health clinic services, employee assistance programs). The percentage of respondents aware of cessation services varied across the state, with more respondents in the northeast region of the state aware of cessation services and fewer in the southeast region of Missouri (Figure 4).

Figure 4: Current smokers were more likely to report awareness of cessation services in northeast Missouri and less likely in the southeast.

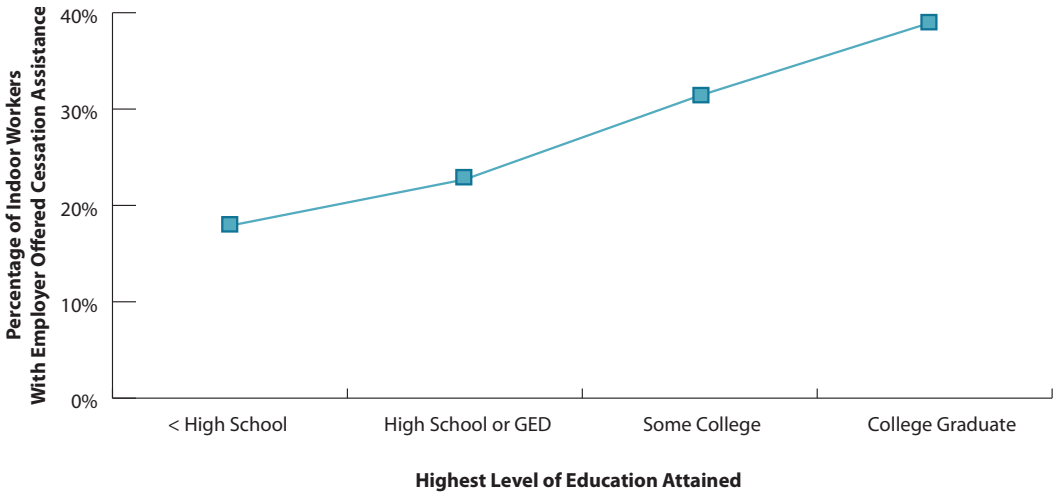


Awareness of cessation services varied across demographic indicators. About 70% of Medicaid recipients and individuals without insurance reported being unaware of available cessation services, compared with other insurance groups who reported higher levels of awareness. In addition, as the education and income level of respondents increased, so did the respondents' awareness of cessation services. More Hispanic respondents (83%) reported that they were aware of tobacco cessation services than White (79%), African American (67%), or other racial/ethnic groups (66%). (For more information see Appendix B.)

Workplace Cessation Assistance

Among Missourians who work indoors, 32% reported that their employers offered cessation assistance to employees who want to quit smoking. However, this varied considerably by several demographic variables. In particular, more individuals with higher levels of education and income had employers that offered cessation assistance to employees. Among racial/ethnic groups, more Whites (32%) and African Americans (32%) reported having employers who offered assistance compared with Hispanics (23%) and other races (19%).

Figure 5: Among Missourians working indoors, individuals with higher education levels were more likely to report that their employers offered cessation assistance to employees.



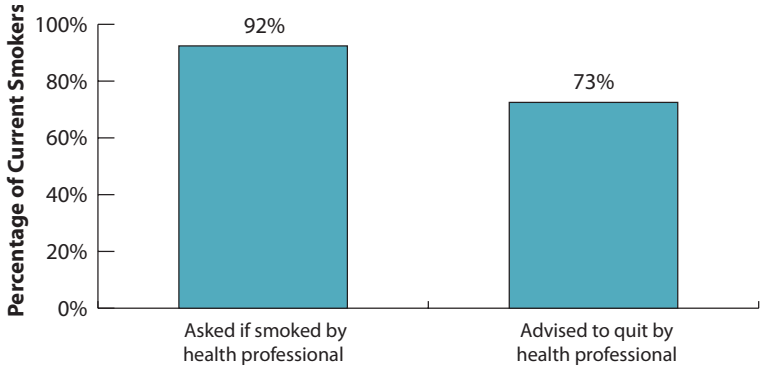
External Influences to Quit

Health Professional Assistance

Health professionals' promotion of tobacco cessation is one of the strongest predictors of successful tobacco cessation in current smokers.[4,6] National guidelines recommend that health care providers ask all patients if they use tobacco products and strongly urge all tobacco users to quit.[4] Researchers also note that universal advice to quit could have a substantial public health impact given the large number of smokers who visit physicians and other health care providers each year.[4]

In 2007, 68% of current Missouri smokers reported visiting a doctor, nurse, or other health professional in the previous 12 months. Among these smokers, 92% were asked if they smoked and 73% were advised to quit (Figure 6). This means that of the estimated 660,000 smokers who visited a doctor, more than 180,000 were not advised to quit.

Figure 6: Health Professional Assistance to Current Smokers[1]



[1] Among smokers who visited health professional in past year

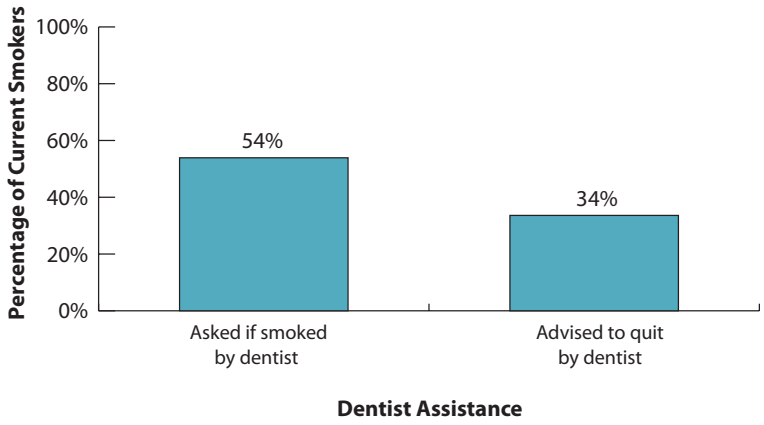
Differences in health professional advice were noted by race, insurance status, and geographic location. Only 59% of the Hispanic smokers who visited a health professional reported being advised to quit smoking, as compared to more than 72% of White, African American and other racial/ethnic group respondents. Uninsured respondents also reported that they were less frequently advised to quit compared to respondents with insurance coverage. Residents living in rural areas reported they were less frequently advised to quit than urban residents. (For more information see Appendix C.)

Dentist Advice

Dentists are able to observe the negative effects of smoking and other forms of tobacco use on the teeth, gums, and mouth.[7] However, nearly half of Missouri tobacco users reported that dentists did not ask them about their tobacco use, or advise them to quit.

In 2007, 55% of current smokers reported seeing a dentist within the previous 12 months. Among smokers who had visited a dentist, 54% were asked about their smoking status and 34% were advised to quit (Figure 7).

Figure 7: Dentist Assistance to Current Smokers[1]



[1] Among smokers who visited dentist or dental clinic in past year

Differences in dentist cessation assistance were also noted by several sociodemographic characteristics. Across the racial and ethnic groups, African American smokers reported most often that they were advised to quit by their dentist. Younger respondents reported being advised to quit using tobacco by their dentists more than older respondents, and urban residents reported being advised to quit more than respondents living in rural or isolated areas. (For more information see Appendix C.)

Tobacco Control Policies

Population-level policy changes such as tobacco tax increases and comprehensive community smokefree policies encourage smokers to consider quitting and seek treatment assistance.[4,8,9] Currently, Missouri has the lowest cigarette tax of all 50 states at $0.17 per pack. Additionally, only 18% of Missourians are protected by 100% comprehensive smokefree policies.[10,11] The majority of survey respondents (56%) indicated support for a comprehensive smokefree workplace policy in their communities.

There is also evidence that the adoption of personal home and car policies may be helpful in motivating smokers to quit.[12] In 2007, 69% of Missourians reported a smokefree home policy and 64% reported a smokefree car policy.

What Does All of This Mean?

The economic and health benefits of cessation are considerable. With more than 64% of current Missouri smokers seriously considering quitting within the next six months, it is important to examine opportunities to motivate, assist, and support these individuals toward long-term cessation success.

Based on the findings presented in this report, the following are recommendations for the Missouri tobacco control community:

Ensure consistent identification, advice and treatment of every tobacco user by healthcare professionals and delivery systems.

Healthcare professionals are in a key position to identify tobacco users and assist them in their cessation efforts. Even brief advice from healthcare professionals increases a smoker's chance of quitting, and the opportunity to link smokers with effective counseling and medication results in even greater success.[4,6]

In 2007, 68% of Missouri smokers reported visiting a doctor, nurse, or other healthcare professional within the previous 12 months and 55% visited a dentist or dental clinic. Among these patients, identification of tobacco use and advice to quit was not universal. Although the majority of smokers (92%) were identified during doctor visits, only 73% were advised to quit. Interventions by dentists were even less common. Only 54% of smokers were asked about their smoking status and only one in three (34%) were advised to quit. Continued efforts to increase the consistent identification, advice, and treatment of every tobacco user are needed.

Increase access to and use of evidence-based cessation treatment.

Use of effective, evidence-based treatments have been shown to significantly increase rates of long-term abstinence.[4] However, the majority of Missouri smokers making a quit attempt did not take advantage of any type of cessation assistance. Current national guidelines recommend reducing out-of-pocket costs as a means of increasing the use of effective drug and counseling therapies.[6,13,14] It is also recommended that all private and government health insurance plans include comprehensive cessation treatment as a reimbursed benefit.[15]

Low utilization of cessation services may also be due in part to lack of awareness. Nearly one in four Missouri smokers were unaware of available cessation services. Efforts to promote available cessation resources to specific populations and regions would be beneficial.[6,14] It is important to note, however, that awareness of resources may not always lead to increased intention to quit. For example, residents in northeast Missouri reported higher awareness of cessation resources but lower intention to quit than other regions in the state. This region might benefit from more motivation-focused cessation messages to move residents from awareness to action.

Implement comprehensive, population-level tobacco control policies.

Population-level policies such as tobacco tax increases and 100% smokefree policies encourage many smokers to consider quitting and seek treatment assistance. A recent report by the American Cancer Society estimates that a comprehensive statewide law in Missouri would prompt 60,200 adults to quit smoking and that a $1.00 increase in Missouri's cigarette tax would result in an estimated 49,000 current smokers quitting.[8,9] Evidence shows that in order to achieve the greatest public health benefit, it is critical that current smokers are aware of and have access to effective treatments during and following the implementation of these policies.[4]

References

1. U.S. Department of Health and Human Services. (2004). The Health Consequences of Smoking: A Report of the Surgeon General. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health.

2. U.S. Department of Health and Human Services. (2000). Reducing Tobacco Use: A Report of the Surgeon General. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health.

3. Campaign for Tobacco-free Kids. (2008). *Tobacco Cessation Works: An Overview of Best Practices and State Experiences.* Retrieved August 22, 2011 from http://www.tobaccofreekids.org/research/factsheets/pdf/0245.pdf

4. Fiore MC, Jaén CR, Baker TB, et al. (2008). *Treating Tobacco Use and Dependence: 2008 Update.* Clinical Practice Guideline. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service.

5. Hughes JR, Keely J & Naud S. (2004). Shape of the relapse curve and long-term abstinence among untreated smokers. *Addiction,* 99, 29-38.

6. Centers for Disease Control and Prevention. (2007). *Best Practices for Comprehensive Tobacco Control Programs - 2007.* Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, national Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health.

7. Warnakulasuriya S. (2002). Effectiveness of tobacco counseling in the dental office. *Journal of Dental Education. 66(9),* 1079–1087.

8. American Cancer Society. (2011). *Saving Lives, Saving Money. A state-by-state report on the health and economic impact of comprehensive smoke-free laws*. Retrieved August 8, 2011 from http://www.acscan.org/pdf/tobacco/reports/acscan-smoke-free-laws-report.pdf

9. American Cancer Society. (2011). *Saving Lives, Saving Money. A state-by-state report on the health and economic impact of tobacco taxes*. Retrieved August 8, 2011 from http://www.acscan.org/pdf/tobacco/reports/acscan-tobacco-taxes-report.pdf

10. Centers for Disease Control and Prevention. (2010). *Tobacco Control State Highlights, 2010.* Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health.

11. Americans for Nonsmokers' Rights. (2011). *Percent of U.S. State Populations Covered by 100% Smokefree Air Laws.* Retrieved June 1, 2011 from http://www.no-smoke.org/pdf/percentstatepops.pdf

12. Farkas AJ, Gilpin EA, Distefan JM & Pierce JP. (2004). The effects of household and workplace smoking restrictions on quitting behaviours. *Tobacco Control,* 8, 261-265.

13. Centers for Disease Control and Prevention. *Key Outcome Indicators for Evaluating Comprehensive Tobacco Control Programs.* Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2005.

14. Zaza S, Briss PA & Harris KW (Eds.). (2005). *The Guide to Community Preventive Services: What Works to Promote Health?* New York: Oxford University Press.

15. American Lung Association. (2011). *Cessation Coverage.* Retrieved August 22, 2011 from http://www.lungusa.org/stop-smoking/tobacco-control-advocacy/states-communities/cessation-coverage.html

Appendix A: Efforts to Quit

Demographics	*Percentage of current smokers who:* Believe they can successfully quit (%)	Intend to quit in next six months (%)	Attempted to quit in past year (%)
Age			
18 - 24	84.8	66.4	64.7
25 - 34	84.4	62.9	55.5
35 - 44	82.1	63.4	46.9
45 - 54	75.4	69.2	50.3
55 - 64	75.3	60.3	44.9
65+	64.0	52.5	44.9
Gender			
Female	80.1	65.6	53.9
Male	78.5	61.8	48.5
Race/Ethnicity			
White	78.1	62.3	49.5
African American/Black	87.4	73.3	59.5
Hispanic	86.4	65.7	62.2
Other Race	73.0	65.7	56.8
Education			
Less than high school	71.4	62.9	50.8
High school graduate or GED	76.6	62.6	49.1
Some college	82.8	65.0	52.5
College graduate	87.4	65.2	55.0
Income			
Less than $25,000	74.8	66.7	56.3
$25,000 - $49,999	78.1	61.8	48.0
$50,000 or more	86.4	64.8	51.3
Insurance Status			
Private	84.6	65.4	49.9
Medicare	65.1	62.8	51.6
Medicaid	76.3	72.1	60.0
Other Government	73.1	48.7	56.4
No Insurance	76.5	60.5	50.7
Rural-Urban Status			
Rural	77.5	62.3	50.4
Urban	84.8	68.0	53.7
Overall	**79.3**	**63.8**	**51.3**

Appendix B: Awareness of Cessation Resources

Demographics	Current smokers aware of available cessation services (%)
Age	
18 - 24	82.2
25 - 34	78.6
35 - 44	75.7
45 - 54	73.6
55 - 64	77.3
65+	77.8
Gender	
Female	76.2
Male	77.7
Race/Ethnicity	
White	78.8
African American/Black	66.9
Hispanic	83.2
Other Race	65.6
Highest Level of Education	
Less than high school	64.0
High school graduate or GED	76.3
Some college	78.5
College graduate	88.1
Income Level	
Less than $25,000	68.5
$25,000 - $49,999	80.9
$50,000 or more	84.2
Insurance Status	
Private	82.4
Medicare	72.5
Medicaid	69.5
Other Government	86.0
No Insurance	69.4
Rural-Urban Status	
Rural	78.3
Urban	73.3
Overall	**76.9**

Appendix C: Health Professional and Dentist Assistance

Demographics	*Percentage of current smokers:* Advised to quit smoking by health care professional (%)	Advised to quit smoking by dentist (%)
Age		
18 - 24	72.2	42.6
25 - 34	71.5	39.4
35 - 44	73.9	37.1
45 - 54	74.1	30.2
55 - 64	69.2	18.5
65+	72.4	20.2
Gender		
Female	72.1	32.4
Male	73.1	35.0
Race/Ethnicity		
White	72.7	31.3
African American/Black	72.9	45.1
Hispanic	58.7	34.1
Other Race	74.2	35.6
Highest Level of Education		
Less than high school	71.1	29.8
High school graduate or GED	72.7	36.0
Some college	72.9	33.9
College graduate	72.5	30.3
Income Level		
Less than $25,000	71.9	43.3
$25,000 - $49,999	74.8	33.4
$50,000 or more	70.9	29.1
Insurance Status		
Private	73.0	30.9
Medicare	72.7	24.4
Medicaid	76.9	54.1
Other Government	75.1	38.2
No Insurance	67.7	37.9
Rural-Urban Status		
Rural	71.9	31.3
Urban	73.8	39.0
Overall	**72.5**	**33.6**