

A Comprehensive Report: Tobacco Use Among Consumers of Services of the Missouri Department of Mental Health

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Glossary of Acronyms

ADA Division of Alcohol and Drug Abuse CMHC Community Mental Health Center

CPS Division of Comprehensive Psychiatric Services

DD Division of Developmental Disabilities
DHSS Department of Health and Senior Services

DMH Department of Mental Health

MIMH Missouri Institute of Mental Health

NASMHPD National Association of State Mental Health Program Directors

NSDUH National Survey on Drug Use and Health

A detailed copy of this report, including copies of survey instruments and details of the assessment, can be found on the Department of Mental Health's website at: http://dmh.mo.gov/spectopics/NoButts.htm

Executive Summary

Smoking is a public health issue that affects all segments of the population. Known to adversely affect the health of those who engage in it as well as those close to smokers, the issue is particularly troubling among those who require mental health services. Tobacco use among mental health consumers is one factor that results in people who have mental illnesses dying 25 years earlier than the general population.

Although a state plan to reduce smoking in the general population has been completed, the high prevalence of tobacco use among the mental health consumer population requires a specialized approach. In some circumstances, tobacco use may be seen as a treatment tool, an activity that helps to "relieve stress or relax," while exposing consumers to the dangers that come with nicotine addiction.

In an effort to address this serious issue, the Missouri Department of Mental Health is seeking to develop a plan that coincides with the state plan to determine the most effective methods of reducing tobacco use among its consumers. The first step in this endeavor – to determine the scope of the problem – has been completed, the results of which are contained in the following pages of this report.

The Missouri Department of Mental Health (DMH) was awarded a 12-month grant from the Missouri Foundation for Health in December 2007 to assess the prevalence of tobacco use by consumers of mental health services in the state. DMH contracted with the Missouri Institute of Mental Health (MIMH) to conduct all the surveys, focus groups, research of the literature, and additional work necessary to ensure appropriate determination of usage in the targeted population.

Background

It has been known for several years that persons with serious mental illnesses die younger than the general population. Recent evidence reveals that the rate of serious morbidity and mortality in this population has accelerated. In fact, persons with serious mental illness are now dying 25 years earlier than the general population. This increased morbidity and mortality are due largely to treatable medical conditions that are caused by smoking, obesity, substance abuse, and inadequate access to medical care.

Smoking is the leading cause of preventable death in the United States and the single most avoidable cause of morbidity and premature mortality worldwide.² Adverse health consequences of smoking include lung cancer, cardiovascular disease, and stroke. The literature indicates that 50% to 90% of individuals with mental illness or addiction are tobacco-dependent, and that rates vary according to co-occurring disorder diagnosis and the setting of the study.³

Large population-based studies in the United States report the current rate of smoking to be approximately 22% to 28%. Smokers with current psychiatric disorders have significantly higher rates of smoking (41% on average), and it has been estimated that patients with mental illnesses consume 44.3% of all cigarettes in the United States. The highest smoking prevalences were found for people with bipolar disorder (68.8%), psychotic disorders (49.4%) and substance use disorders (49.0%).

Research reported by Grant, et. al., in the Archives of General Psychiatry found that individuals with a current psychiatric disorder (with and without nicotine dependence) made up 30.3% of the population, yet they consumed 46.3% of all cigarettes smoked in the United States. Clearly national data indicate significant disparities exist relative to mental health consumers. The task outlined in this grant application was to determine if these same disparities hold true in Missouri for mental health consumers.

Scope of Assessment

Initial plans included examining existing statewide administrative data sets to determine the prevalence of tobacco use among persons with mental illnesses who have been accessing public-sector mental health care in Missouri, and to determine the relationships between tobacco use and primary diagnosis. However, such data do not exist. MIMH began implementation of other assessment strategies to develop a baseline study on the following criteria:

- 1. A survey of consumers who receive services from the Missouri Department of Mental Health (DMH).
- 2. A study of findings from a survey conducted by the National Association of State Mental Health Program Directors (NASMHPD).
- 3. An online survey for mental health and substance abuse agencies.
- 4. A survey of the literature.

Prevalence Findings 1

Tobacco use among consumers of mental health and substance abuse services

Around 64% of Missouri consumers of mental health and substance abuse services regularly use tobacco products. This compares to around 30% in the general population nationally (NSDUH, 2006), and around 25% in the general population in the state of Missouri (DHSS, 2006).

National data from the 2006 NSDUH estimate that cigarette use among adults with serious psychological distress is approximately 44%. According to a study by Lasser et al. (2000), regular tobacco use among persons with drug and alcohol problems is estimated to be approximately 50%. These data suggest that regular tobacco use among Missourians receiving publicly funded services may be considerably higher than tobacco use in other states across the country.

Prevalence Findings 2

Tobacco use among consumers of developmental disabilities services

A survey of 109 agencies funded by DD indicates that tobacco use among clients is reported to be very low. Forty percent of agencies report no smoking among their clients.

Tobacco use among staff is considerably higher, with only 7% of agencies reporting they have no staff who smoke.

Tobacco Policies and Practices of Mental Health Providers

Findings from 68 agencies funded by ADA or CPS who responded to an online survey include the following:

- Almost all (97%) prohibit indoor smoking altogether. Policies prohibiting indoor smoking but allowing smoking in designated areas are most common. Around 20% of all agencies have policies prohibiting indoor and outdoor smoking completely.
- While almost half of agencies prohibit indoor and outdoor use of smokeless tobacco, around 18% do allow indoor use, far more agencies than those that permit indoor smoking.
- Almost 70% of agencies would be interested in some kind of technical assistance on tobacco
 cessation. Training clinicians in supporting a smoke-free lifestyle and training on tobacco
 cessation programs, followed by addressing staff tobacco use, were the most common requests.

Conclusion

Tobacco use among Missouri consumers of comprehensive psychiatric and substance abuse services ("consumers") is considerably higher than that of the general population in Missouri and the nation as a whole. Almost two-thirds of Missouri consumers use tobacco than Missourians generally, with around 64% of consumers reporting regular use compared to 24.5% of adult Missourians. Tobacco use among these Missouri consumers is more than three times the tobacco use rate in the general population nationally (19.8%). (Behavioral Risk Factor and Surveillance Survey [BRFSS], 2007).

Tobacco use among Missouri consumers is also higher than comparable consumer use rates nationally. While 64% of Missouri CPS/ADA consumers use tobacco, approximately 44% of adults with serious psychological distress nationally smoke cigarettes (National Survey on Drug Use and Health [NSDUH], 2006). Regular tobacco use among persons with drug and alcohol problems nationally is estimated to be approximately 50% (Lasser et al., 2000).

Higher use rates among Missourians may be due to several factors, including weaker smoking ordinances, a lesser amount of funding for tobacco prevention, and lower excise taxes. For individuals experiencing mental illnesses, higher rates also may be attributable to a culture among those with mental health disorders that supports tobacco use, lenient tobacco use policies in provider agencies, a lack of tobacco cessation programs at many mental health and substance abuse provider agencies, and a lack of pressure from primary care physicians to quit smoking.

Rates of tobacco use for DD consumers as determined by MIMH researchers are significantly lower than both the general population and the national average. These findings may be the result of the circumstances of the people surveyed and may not accurately reflect the tobacco use of the DD population. To facilitate the survey process, service coordinators in three DD regional offices (one urban, two rural) were asked to conduct the survey with people with whom they would have face-to-face contact during the spring of 2009. People who receive significant supports and services are seen more frequently by their service coordinators, and thus were over-represented in the sample.

A significant proportion of the division's consumers receive very little in the way of supports and services. Many of these people are well integrated in the community, require less intense

supports and services, are very active in social groups, and may have jobs. It is possible this subgroup has a higher rate of smoking than those in the actual sample; however, due to the limitations of the study, this group was under-represented in the sample. Therefore, when these data are used as the basis for planning purposes, caution is urged. Bernie Simons, DMH Director of the Division of Developmental Disabilities, believes that disparities continue to exist for consumers with developmental disabilities who receive mental health services, and any planning needs to accommodate their special needs and abilities.

Verifying that consumers of mental health services do indeed utilize tobacco at a rate higher than the general population in either Missouri or the rest of the country emphasizes the urgency of developing a statewide plan to reduce these disparities. The plan must have significant input from consumers of mental health services, be grounded in science, and be aligned with the state plan to prevent and reduce tobacco use.

Executive Summary References

- 1 National Association of State Mental Health Program Directors Medical Directors Council. Morbidity and Mortality in People with Serious Mental Illness. October 2006.
- 2 US Department of Health and Human Services. Health Consequences of Smoking Cessation: A Report of the Surgeon General. Washington, DC: Government Printing Office; 1994:124.
- 3 Williams, Jill M. and Ziedonis, Douglas. Addressing tobacco among individuals with a mental illness or an addiction. Addictive Behaviors 29 (2004) 1067-1083.
- 4 Lasser, K., Wesley, B.J., Himmestein, D. U., & Bor, D. H. (2000). Smoking and Mental Illness: A population-based prevalence study. Journal of the American Medical Association, 284, 2606-2610.

A Comprehensive Report: Tobacco Use among Consumers of Services of the Missouri Department of Mental Health

Assessing the Problem

In December 2007, the Missouri Foundation for Health (MFH) awarded a grant to the Missouri Department of Mental Health (DMH) to assess the prevalence of tobacco use among Missourians who receive the department's services. DMH enlisted the services of the Missouri Institute of Mental Health (MIMH) and in May 2008, MIMH began the process of conducting the surveys, focus groups, literature search, and additional work necessary to ensure appropriate determination of usage in the targeted populations. The populations consist of persons served by all three DMH service divisions: the Division of Comprehensive Psychiatric Services (CPS), the Division of Alcohol and Drug Abuse (ADA), and the Division of Developmental Disabilities (DD).

A total of 586 consumers receiving services for mental health and/or substance abuse problems from five Community Mental Health Centers (CMHCs) participated in the assessment, along with 345 consumers receiving services at three DD regional centers. All consumers were asked to complete an anonymous one-page questionnaire about tobacco use and related issues. Those with cognitive or literacy issues were assisted by agency staff. Because most CMHCs serve consumers needing substance abuse or mental health services, responses for those two groups have been combined into one report. Findings from DD consumers are reported separately.

Details regarding sampling methods and forms as well as demographic characteristics of the samples are provided in the Appendices.

Scope of Assessment

Initial plans included examining existing statewide administrative data sets to determine the prevalence of tobacco use among persons with mental illnesses who have been accessing public-sector mental health care in Missouri, and to determine the relationships between tobacco use and primary diagnosis. However, such data do not exist. MIMH continued with the original assessment design activities to develop a baseline study based on the following criteria and actions.

- 1. Survey consumers who receive services from the Division of Comprehensive Psychiatric Services, the Division of Alcohol and Drug Abuse (ADA), or the Division of Developmental Disabilities (DD) within Missouri's Department of Mental Health (DMH). In total, 586 persons receiving services from five Community Mental Health Centers (CMHCs) and 345 consumers receiving services at three DD regional centers completed an anonymous one-page questionnaire about their tobacco use.
- 2. Study findings from a survey on tobacco policies at psychiatric facilities conducted by the National Association of State Mental Health Program Directors (NASMHPD) were made available to MIMH researchers.

- 3. Provide an online survey regarding smoking policies and practices to 68 mental health and substance abuse agencies funded by DMH.
- 4. Complete a survey of the literature studied for purposes of the assessment.

The Prevalence of Tobacco Use among Missouri CPS/ADA Consumers

Tobacco use among Missouri consumers of mental health and substance abuse services ("consumers") is considerably higher than that of the general population in Missouri and the nation as a whole. Almost two-thirds of Missouri consumers use tobacco, with around 64% of consumers reporting regular use compared to 24.5% of adult Missourians. Tobacco use among Missouri consumers is more than three times the tobacco use rate in the general population nationally (19.8%). (Behavioral Risk Factor and Surveillance Survey [BRFSS], 2007).

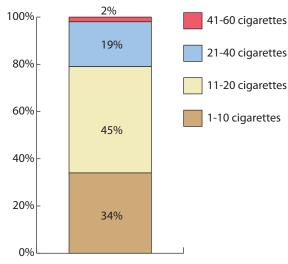
Tobacco use among Missouri consumers is also higher than consumer use rates nationally. While 64% of Missouri consumers use tobacco, approximately 44% of adults with serious psychological

distress nationally smoke cigarettes (Substance Abuse and Mental Health Services Administration, 2005). Regular tobacco use among persons with drug and alcohol problems nationally is estimated to be approximately 50% (Lasser et al., 2000).

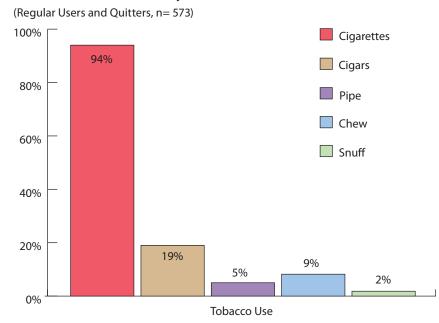
Most Missouri consumers (87%) surveyed who use to-bacco products regularly use them every day. Almost all (97%) regular users smoke cigarettes. Around 18% also smoke cigars, and around 9% also chew tobacco.

Tobacco users report using to relieve stress and relax

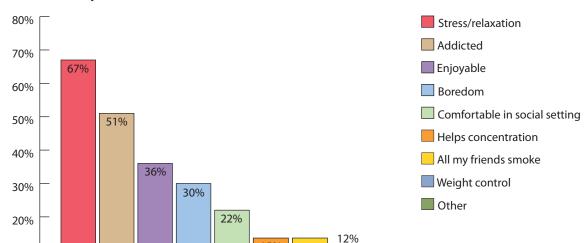
Number of Cigarettes Smoked by ADA/CPS Mental Health Consumers Daily (n= 278)



Tobacco Products Used by ADA/CPS Mental Health Consumers



(67%), because they are addicted (51%), for enjoyment (36%), to relieve boredom (30%) and to feel comfortable in social settings (22%).



15%

Reasons Why ADA/CPS Mental Health Consumers Use or Used Tobacco Products (n= 1136)

Reasons Why Use or Used Tobacco Products

Additional Data

10%

0%

• Around 15% of consumers in this study regularly used tobacco in the past but have quit successfully. Around 21% have never used tobacco regularly.

15%

5%

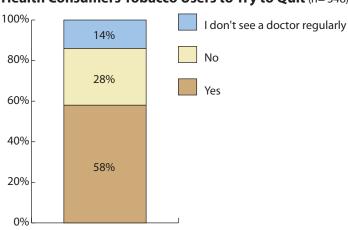
- Consumers in residential settings use tobacco regularly (76%), more than those in outpatient (61%) or community (59%) settings.
- More males (76%) are regular users than females (53%).
- Regular tobacco use is most common among young adults.
- Caucasians and African Americans use at about the same rate.
- Females are more likely than males to use tobacco to relieve stress.

Doctor Involvement

Doctors of around two-thirds (64%) of all CPS and ADA consumers regularly ask if their patients use tobacco. Around one-fourth of doctors don't ask, and around 12% of consumers don't see a doctor regularly. Males and young adults are least likely to report that their doctor asks about tobacco use; they were also least likely to see a doctor regularly.

• Among regular users, more than half (58%) indicated that their doc-

Whether Doctors Regularly Ask ADA/CPS Mental Health Consumers Tobacco Users to Try to Quit (n= 348)



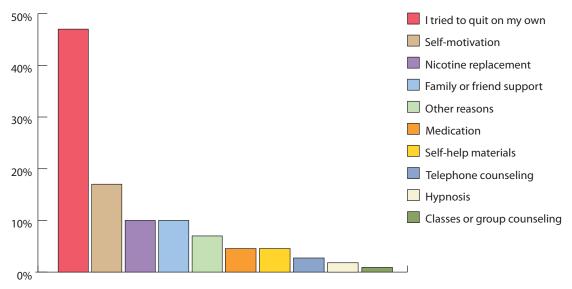
tors regularly ask if they want to try to quit. Doctors ask females more than males (78% vs. 58%) and older consumers considerably more than younger consumers (18-24 year olds: 42%; 55 and older: 78%).

• A majority of consumers (53%) do not feel that their tobacco use interferes with their medications. Almost one-third (29.3%) are not sure if it does.

Desire to Quit

- 56% would like to quit using tobacco and 66% indicated that they tried to quit in the past but were unsuccessful.
- Health reasons and cost were the leading reasons given for wanting to quit.
- When asked what methods consumers used to try to quit using tobacco products, three-fourths of current users tried to quit on their own (74%), with nicotine replacement therapy used far less often (34%) and other methods even less frequently.

Methods ADA/CPS Mental Health Consumers Used That Were Not Helpful In Successfully Quitting Tobacco Products (n= 57)



Smoking Habits of Those Who Have Quit Smoking

- Most consumers who no longer use tobacco quit on their own (68%).
- Around one-fourth of those who no longer use tobacco quit the first time that they tried.
- Over 30% of consumers who successfully quit using tobacco products have quit for more than five years, and around the same percentage quit within the past six months.
- Unhelpful methods of quitting included try to quit on one's own and nicotine replacement therapy.

The Prevalence of Tobacco Use among Missouri DD Consumers

A total of 345 consumers receiving services at three DD regional centers took part in the study. Consumers received home-funded services, residential services, or case management services. Consumers were asked to complete an anonymous one-page questionnaire about tobacco use and related issues. Those with cognitive or literacy issues were assisted by agency staff.

Characteristics of Respondents

- Of the sample of consumers of DD services, a little more than half (56%) are male and around 78% are Caucasian.
- The sample included adults of all ages, as well as some (10%) under the age of 18.
- Consumers in the sample came from the City of St. Louis, the Rolla area, and Kirksville, MO.
- Around 25% of consumers sampled received home-funded services, 28% received residential services and 47% received case management services.

Tobacco Use Prevalence

- 9% of consumers surveyed regularly use tobacco products, 7% were regular users at one time but have quit, and 84% never used regularly. National data from the 2004 Behavioral Risk Factor Surveillance Survey (BRFSS) estimate that the smoking rate among those with developmental disabilities nationally is around 29.9% (BRFSS, 2006), and the rate in Missouri is around 25.5% (Armour et al., 2007).
- Although rates of tobacco use are low overall, significantly more males use regularly than females (14% vs. 4%). Slightly more older consumers (35 and over) use tobacco than younger consumers.
- Around three-fourths of those who use regularly smoke cigarettes. Around 25% use chewing tobacco and around 13% smoke cigars. Those who smoke cigarettes tend to also smoke cigarettes; those who chew tobacco tend not to smoke cigarettes or cigars.
- Most consumers (87%) who use tobacco products regularly use them every day.
- Most common reasons given for tobacco use were stress reduction/relaxation, enjoyment and addiction.

Barriers to Tobacco Cessation

General population

Higher use rates among Missourians may be due to several factors, including weaker smoking ordinances, less funding for tobacco prevention, and lower excise taxes.

Weaker smoking ordinances. Research indicates that enforcing smoke-free ordinances
reduces smoking consumption and increases smoking cessation (Moskowitz, et al., 2000).
Missourians are permitted to smoke in more public places than the majority of states in the
nation. Twenty-four states currently have comprehensive smoke-free policies prohibiting

smoking in almost all public places, as well as in restaurants and bars. Missouri does not prohibit smoking in bars or restaurants.

Furthermore, fewer Missourians are protected by smoke-free policies at government and private workplaces, retail stores, and recreation/cultural facilities. According to Missouri state statute, bars and restaurants that seat fewer than 50 people, bowling alleys, billiard parlors, retail tobacco shops, rooms and halls used for private social functions, limousines and taxicabs where the driver and all passengers agree to smoking, stage performances that include smoking, indoor sports stadiums seating more than 15,000 people, and private residences are not considered public places for the purposes of indoor smoking regulations (Health and Welfare, 2008).

At the state level, the one smoking ban proposal submitted to the Missouri General Assembly failed before reaching a hearing. As of August 2008, only nine cities, including Kansas City, had enacted bans on smoking within all bars, restaurants, and similar places. Proposals to restrict smoking in public places have been rejected in six locations, including St. Louis County and Jefferson City. Most Missourians (80%) do not support smoking bans and in 2007, Forbes Magazine rated St. Louis as the "best city for smokers" in the United States. Winston-Salem, North Carolina, was rated second (Riper & Malone, 2007).

- Insufficient funding for tobacco prevention. The Centers for Disease Control (CDC) has recommended that Missouri spend between \$73 million annually for tobacco control. Recent data show that in 2008, Missouri spent 3.7% of the recommended amount on tobacco prevention programs. Only one state in the nation spends less on tobacco prevention than Missouri (Campaign for Tobacco-Free Kids, 2008).
- Lower excise taxes. The excise tax rate for cigarettes in 2008 for Missouri was \$.17 per pack compared to the national median of \$1.00. Again, this tax rate is second lowest in the nation (Federation of Tax Administration, 2008). Excise taxes have been used for community, media, and school prevention programs. Research has shown that increasing the excise tax rate on cigarettes is one of the most effective strategies in decreasing tobacco consumption (Campaign for Tobacco-Free Kids, 2008).

Mental Health Consumers

In addition to the barriers to quitting noted above for all Missourians, persons with mental illness and substance abuse have additional factors that may explain their higher use rates. Among those with mental illnesses, higher rates also may be attributable to a culture that supports tobacco use, lenient tobacco use policies in provider agencies, a lack of tobacco cessation programs at many mental health and substance abuse provider agencies, and a lack of pressure from primary care physicians to quit smoking.

Lenient Tobacco Use Policies in Provider Agencies. According to the survey of Missouri mental health and substance abuse provider agencies, only 22% are smoke-free. Thirty-seven percent allow smoking in outdoor designated areas, and 28% allow smoking anywhere outside on provider property.

Lack of Tobacco Cessation Programs in Provider Agencies. Most Missouri provider agencies do not offer in-house tobacco cessation programs, but rather refer consumers to external

tobacco cessation programs or quit lines. Around one-third offer individual counseling on tobacco cessation, and around 25% offer nicotine replacement patches. Almost 70% of agencies would be interested in some kind of technical assistance on tobacco cessation. Training clinicians in supporting a smoke-free lifestyle and training on tobacco cessation programs, followed by addressing staff tobacco use, were the most common requests.

Lack of Pressure from Primary Care Physicians. According to the 2008 consumer survey, the vast majority of consumers (72.3%) who see a primary care physician regularly report that their doctors ask them about their tobacco use habits. Less than half of doctors (42%) ask if they want to try to quit. The U.S. Public Health Service has established guidelines for physicians that urge them to ask all patients about their use patterns and to encourage quitting; compliance rates in the general population of physicians are at approximately 86%. These data suggest that primary care physicians in Missouri serving persons with mental illness or substance abuse issues are less likely to ask about tobacco use or to encourage quitting. Furthermore, studies indicate that many clinicians who provide services to persons with mental illnesses believe that it is more difficult for persons with mental illness and substance abuse issues to quit than adults in the general population.

Culture of Tobacco Use. With tobacco use prevalence rates higher in Missouri than nationally among the general population, it is hardly surprising that Missouri mental health consumers use more than their counterparts nationally. According to El-Guebaly, et al. (2002), "Smoking is a major part of their daily routine and constitutes an activity that provides some structure to a day with few activities." Furthermore, studies of the general population have found that being in daily contact with other smokers may reduce successful quitting (Richmond et. al., 1993); this would undoubtedly also be the case for persons with mental illnesses and substance use problems and may partially explain their higher use rates. Twenty-two percent of consumers surveyed reported that they smoked to feel more comfortable in social settings.

Tobacco Industry Targeting. It is estimated that persons with mental illnesses consume around 44% of all tobacco products in the nation (Lasser et al., 2000). With decreased smoking rates in the general population and high use rates among persons with mental illnesses, market strategies among some tobacco companies have specifically targeted those with mental illnesses. Strategies included distribution of free cigarettes in mental health facilities (Morris et al., 2006).

Fewer internal resources. The National Cancer Institute and other researchers have recently introduced the concept of "hardening," wherein certain sub-populations, like consumers, may have a harder time quitting smoking because of fewer resources on a personal level to overcome addiction and greater barriers to behavioral change (National Cancer Institute, 2003).

In 1999, guidelines were established by the U.S. Public Health Service recommending that physical health care providers ask their clients about their smoking habits. In 2000, guidelines were updated to: (1) ask every patient about tobacco use, (2) advise smokers to quit, (3) assess their willingness to quit, (4) assist with treatment and referrals, and (5) create follow-up contracts. (Fiore, 2000). In 2007, the Association of American Medical Colleges reported that 86% of physicians ask patients about their smoking status and advise clients to quit but only 13% refer smokers to treatment and only 17% arrange follow-up. (Association of American Medical Colleges (2007).

The benefits of smoking. Among mental health consumers who smoke in Missouri, 67% reported that they smoke to relieve stress and relax, 51% use tobacco because they are addicted, 36% smoke for enjoyment and 30% smoke out of boredom.

While the harmful effects of smoking have been well documented, there is some evidence that smoking is beneficial to some persons with mental illnesses. Persons with schizophrenia who smoke may experience increases in energy and motivation as a result of smoking. Consumers have reported that smoking can improve concentration and improve cognitive functioning, particularly among persons with psychotic illnesses. Smoking also has been shown to improve mood and enjoyment (McEwen & McRobbie, 2007).

The Need for Intervention

Cessation for persons with mental illnesses can improve the physical health consequences of smoking, help reduce the financial burden from the purchase of tobacco, increase self-esteem, and reduce consumers' feelings of stigma (Johnson, 2006). The life span of persons with mental illnesses has been estimated to be 25 years shorter than those without mental illnesses (National Comorbidity Survey - Replication, 2005). A large portion of those who die early die from smoking-related illnesses.

- According to the survey, 56% of Missouri consumers who regularly use tobacco would like to quit. This compares to 74% of adults nationally (Gallup, 2008). Among Missouri consumers, health and cost were the leading reasons given for wanting to quit.
- 66% of current tobacco users indicated that they tried to quit in the past but were unsuccessful. Three-fourths of current users tried to quit on their own (74%), with nicotine replacement therapy used far less often and other methods even less frequently. Prior studies have shown that persons with mental illnesses find it more difficult to quit than those in the general population (Dani & Harris, 2005).

Effective Approaches to Eliminating Tobacco Use

Significant research has been conducted on successful methods to quit using tobacco products among the general population. Hopkins et al., 2001, found the following methods to be successful: (1) increasing the price of tobacco products; (2) mass-media campaigns; (3) increased excise taxes; (4) tobacco prevention programs; (5) combined quit line/education/therapy interventions; (5) health care provider assessment of tobacco use and counseling; (5) provider counseling to patients, including brief advice; and (6) pharmacologic treatment of nicotine addiction (including use of nicotine patch and gum, and bupropion) (Hopkins et al., 2001).

Effective methods for quitting tobacco use for persons with mental illness also have been established. Johnson et al., 2006, found the following approaches to be effective: (1) integrating tobacco treatment for persons with mental illnesses or addictions into existing mental health and addiction services; (2) counselors and health care provider support and training to incorporate brief interventions into their practices; (3) nicotine replacement therapy for all individuals with mental illnesses or addictions who are willing to quit or reduce their smoking; (4) medication monitoring in the first few months for individuals who are taking

anti-psychotic medications and are trying to quit smoking; and (5) smoke-free spaces for consumers (Johnson et al., 2006). Other research has found that nicotine replacement therapy, in combination with individual or group counseling and using motivational interviewing or cognitive behavioral therapy, is effective (Morris et al., 2006). Generally, the most effective programs appear to be those that include more than one approach.

Toolkits to provide assistance to health care professionals are available from a few sources. The University of Colorado–Denver has developed a comprehensive toolkit on tobacco cessation with specific steps for practitioners to take in working with consumers (see http://smokingcessationleadership.ucsf.edu/Downloads/MH/Toolkit/Quit_MHToolkit.pdf). They promote an "ask/advise/refer/assist/assess" approach for health professionals to follow with practical and detailed examples at each step to facilitate successful interventions. The National Association of State Mental Health Program Directors also has developed the "Best-Practices Toolkit Promoting Wellness and Recovery" for use in psychiatric settings. (See http://www.nasmhpd.org/general_files/publications/NASMHPD.toolkitfinalupdated90707.pdf).

Smoking Policies and Practices in State Psychiatric Facilities

Characteristics of Respondents

- Of the sample of consumers of mental health and/or substance abuse services, a little less than half were male and around three-quarters were Caucasian.
- The sample included adult consumers from all age groups and different geographic settings (urban, rural, suburban and small town).
- Around one-third of consumers receive services in community settings, around one-fifth in residential facilities, and almost one-half receive outpatient services.

Detailed Findings

In spring 2008, the National Association of Mental Health Program Directors (NAMHPD) conducted a survey of Department of Mental Health facilities across the state of Missouri. All 11 facilities were represented in the sample. Two of the 11 are children's facilities.

Tobacco Use Policy. In the 11 facilities surveyed, all have a current smoking policy that prohibits smoking on all facility premises (indoors and outdoors). This policy was instituted by the director of the Division of Comprehensive Psychiatric Services within the Department of Mental Health in January 2008. The no-smoking policy applies to all clients, employees, and visitors.

- No tobacco products are available to buy legally on any of the campuses.
- The policy applies to all tobacco products, including smokeless tobacco such as chew or snuff.
- Five facilities converted previously designated smoking areas and put them to other uses.

- Effects of Smoke-Free Policy. For the most part, the effects of the no-tobacco use policies have been positive. Sites reported (1) entry into tobacco cessation programs by staff, (2) fewer arguments among clients about smoking times and "fresh air opportunities," (3) less interrupted treatment time, (4) far less contraband and trading for cigarettes, (5) less administrative time spent investigating missing cigarettes, and (6) better use of staff time. Two sites reported some negative effect of policy, including sneaking cigarettes, causing fire hazards, and selling of cigarettes at exorbitant rates. All in all, however, there were many more positive effects mentioned than negative. According to one respondent, "Patients have responded very well to a smoke-free environment."
- Current Treatment Options. All but one adult facility has some form of smoking cessation treatment for clients. Seven facilities offer the patch, gum, and Chantix (varenicline), six have individual counseling available, and five use Zyban (bupropion). Some facilities also offer lozenges and inhalers and one facility also offers nicotine replacement therapy for staff. Five of nine facilities began offering these treatments in the past two years.
- Negative Effects of Smoking in Mental Health Facilities. Smoking practices have affected how business is run in the facilities. One hospital saw smoking or tobacco use correlated with other physical health conditions. Another saw smoking used by staff to coerce, reward, or threat. Still another saw an increase in conflict between patients regarding smoking practices. One experienced that the staff members were not working. Three facilities reported having a client elope leave the area defined by their privilege status while they were on a smoke break. Two of the facilities expressed concern about fire safety and three of the 11 reported having had fires in the facility caused by smoking, with one of those fires having been in the past year. Five of the facilities had no concerns of this nature concerning smoking practices.
- *Tobacco Use*. All but one adult facility and both children's facilities assess client smoking status when clients enter the facility. Two adult facilities reported rates between 21% and 40%, three reported 41% to 60%, two reported 61% to 80%, and two reported rates of 81% to 100%. The two children's facilities report little to no smoking.
- Assessment and Education. Educating smokers on the risks of their smoking can happen at any point in the stay. Eight of the nine adult facilities, and one of the two children's facilities, provide education on smoking risks. Most commonly, this occurs during the treatment planning process, intake, or formal screening. One facility provides education through healthy living education, one as part of substance-use groups, and one as part of after-care plans.

To implement smoking cessation programs, the facilities chose the educational resources that they thought would best suit their needs. Educational pamphlets and group sessions are offered at most facilities (nine). Eight facilities offer healthy lifestyle counseling or a wellness group, and seven offer individual counseling for clients. Six refer their clients to quit lines, four have access to quit-smoking websites, and two have peer support available.

Facilities have a range of professionals who address client smoking. Most have nurses (nine facilities) and psychiatrists (eight facilities), six have social workers, four have psychologists, three have rehabilitation counselors, and two have case managers. One facility uses a health educator, and another uses a substance abuse counselor.

Smoking Cessation Sessions. Six of nine facilities hold smoking cessation sessions. Five hold them weekly, and one holds them daily. Three facilities have average attendance at their

- sessions, while the others have poor attendance. Motivation is used to try to increase client attendance.
- Specialty Training. Specialty training for staff on tobacco cessation treatment is offered at some but not all facilities. Most common was training regarding interactions with prescription medication, followed by training in the assessment of smoking use and dependence and training for medication treatments of smoking. Counseling for smoking dependence, training on awareness of quit lines and referral sources, and training for Wellness Counseling also were mentioned.
- **Resources**. Six of the facilities are using the recently produced NASMHPD's "Tobacco-Free Living in Psychiatric Settings: A Best Practices Toolkit Promoting Wellness and Recovery." Three facilities use Colorado's Toolkit for Mental Health Providers. One uses the ALA Freedom from Smoking Training.
- *Aftercare*. Only one facility specified the client's smoking status in aftercare plans. In six of the 11, staff check for no-smoking policies in housing considered as part of the aftercare plan. Two facilities refer their clients to quit lines after discharge to keep up with smoking cessation practices.
- **Technical Assistance**. When facilities were asked about interest in technical assistance involving smoking policies, the greatest interest was in training for clinicians in supporting a smoke-free lifestyle, assistance dealing with smoking contraband, and tobacco cessation assistance for staff members.

Tobacco Policies and Practices of Mental Health Providers

In the summer of 2008, the Missouri Institute of Mental Health, through the MFH grant to DMH, conducted an analysis of tobacco policies of agencies funded by the Department of Mental Health. The study consisted mainly of an online survey regarding tobacco policies, current practices, and future intentions. Sixty-eight (68) agencies funded by either ADA or CPS responded to the survey. Findings from a similar survey of agencies providing services to persons with developmental disabilities are reported separately.

Provider Characteristics

- Around one-third of all providers who responded to the survey are Community Mental
 Health Centers (CMHCs), most of which provide an array of prevention, treatment,
 and recovery services for persons with mental illnesses and/or substance abuse issues.
 Around 16% are non-CMHC, state-funded agencies that provide residential and outpatient
 substance abuse treatment services. Around 13% of agencies are outpatient facilities, 10%
 are residential care facilities (not state facilities), and the remainder include recovery and
 supported-living organizations, substance abuse prevention agencies, detox facilities, and
 referral agencies.
- Agencies responding to the survey predominantly provide services in the areas of substance abuse prevention, substance abuse treatment, substance abuse recovery, mental health treatment, and mental illness recovery.

Almost all agencies serve adults under age 65, around 65% serve those over 65, around 50% serve teenagers, and 41% serve children under 12.

Most agencies (81%) receive funding from the Division of Alcohol and Drug Abuse (ADA), around half (46%) receive funding from the Division of Comprehensive Psychiatric Services (CPS), and 10% receive funding from the Division of DD in addition to funding received from either ADA or CPS.

Summary of Findings

- Almost all (97%) providers prohibit indoor smoking altogether.
- Policies prohibiting indoor smoking but allowing smoking in designated areas are most common. Around 20% of all agencies have policies prohibiting indoor and outdoor smoking completely.
- Around half of all agencies plan on making changes to their tobacco policies and/or
 practices in the future. Planned changes include going smoke free, providing information
 about tobacco cessation treatment, referrals to tobacco cessation programs, and education on
 tobacco use harm.

Intended Changes to Policy and/or Practice (n=67)

	Percent
None	50%
Go smoke-free entirely (indoors and outdoors)	18%
Offer information about tobacco cessation treatment therapies/medications	18%
Refer to tobacco cessation programs	14%
Offer systematic education on harm from tobacco use	14%
Offer group/individual counseling	13%
Move to regular assessment of tobacco use	9%
Pay for tobacco cessation treatment therapies/medications (including nicotine replacement, Zyban, Chantix, and other medications)	7%
Create designated smoking areas outdoors	5%
Refer to group/individual counseling	5%
Eliminate smoking indoors entirely	4%
Create designated smoking areas indoors	2%
Other	11%

 For those agencies that have made changes or are planning on making changes to their tobacco cessation policies, by far the greatest barrier was client and staff resistance to change.

Barriers Encountered When Changing Smoking Policy (n=68)

Barrier	%
Resistance from clients who smoke	55%
Resistance from employees who smoke	49%
Financial costs	26%
Not a priority for organization	16%
No barriers	16%
Limited capacity or untrained staff	12%
Other	12%

- Around half of all agencies reported client tobacco use rates over 60%.
- Around half of all providers assess tobacco use as a matter of routine, but only around 15% require that staff develop a strategy for clients regarding tobacco cessation.
- Referrals to tobacco cessation programs, informational brochures, and referrals to quit lines
 are the most common tobacco-related services offered by agencies. Around one-third offer
 individual counseling on tobacco cessation, and around 25% offer nicotine replacement patches.
- At agencies that provide cessation services, around 60% of consumers have no financial resources to pay for these services. Around 20% pay for services themselves; other resources include Medicaid, Medicare, and private insurance.
- Almost 70% of agencies would be interested in some kind of technical assistance on tobacco cessation.

Tobacco Use Policies and Practices of Missouri DD Service Agencies

The Missouri Institute of Mental Health conducted an online survey of tobacco policies of agencies funded by the Department of Mental Health, Division of Developmental Disabilities (DD). This survey assessed tobacco policies, current practices, and future intentions. One hundred nine (109) agencies responded to the survey.

Provider Characteristics

- Around two-thirds of all providers who responded to the survey provide DD treatment services. A little less than half provide long-term residential treatment, and around 30% provide supported housing services. Twelve respondents from DD habilitation centers responded to the survey. Other services provided include recovery services, Individualized Supported Living (ISL), group homes, treatment and recovery services for mental illness and substance abuse issues, and prevention programming for DD clients. Eight Senate Bill 40 boards responded to the survey.
- Almost all agencies surveyed (96%) serve adults between ages 18 and 64. A little less than half (46%) serve consumers 65 and above, 40% serve children from age 12 to 17, and 18% serve children under age 12.

Summary of Findings

- Tobacco use among clients is reported to be very low. Forty percent of agencies report no smoking among their clients. Tobacco use among staff is considerably higher, with only 7% of agencies reporting they have no staff who smoke.
- Most, but not all, provider agencies (79%) prohibit indoor smoking altogether. Providers are more likely to allow outdoor smoking anywhere on agency property rather than in designated smoking areas. A small percentage (7%) are completely smoke-free.
- Only 1% allow both indoor and outdoor smoking; 23% of providers allow indoor and outdoor chewing tobacco use.
- Around half of all agencies plan on making changes to their tobacco policies and/or practices
 in the future. Planned changes include going smoke-free and providing information about
 tobacco cessation treatment, referrals to tobacco cessation programs, and education on
 tobacco use harm.
- For those agencies that have made changes or are planning on making changes to their tobacco cessation policies, by far the greatest barrier was client and staff resistance to change.
- Around half of all providers assess tobacco use as a matter of routine. Around 19% require that staff develop a strategy for clients regarding tobacco cessation.
- Referrals to tobacco cessation programs and informational brochures on the harmfulness of tobacco use are the most common tobacco-related services offered by agencies.
- Among agencies that do supply smoking cessation treatments for clients, around half (53%)
 reported that they do not provide any financial assistance. Medicaid is used to cover costs
 for 24% of agencies, and Medicare is used at 11% of agencies.
- Most agencies do not offer smoking cessation sessions (70%). Only seven providers offer smoking cessation sessions; the remainder either do not have anyone who smokes, or they provide services on an as-needed basis (22%).
- Around half of providers were interested in receiving cessation technical assistance. Addressing staff tobacco use (34%) and training on tobacco cessation programs (27%) were the most important issues for those providers, followed by creating a tobacco-free environment and training clinicians to support a tobacco-free lifestyle.

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