

Quitting Smoking

Nicotine Addiction in Minnesota



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INTRODUCTION

Quitting Smoking: Nicotine Addiction in Minnesota is the second in a series of collaborative research reports about smoking from the Minnesota Partnership for Action Against Tobacco (MPAAT), Blue Cross and Blue Shield of Minnesota (Blue Cross), and the Minnesota Department of Health. These organizations conducted surveys of Minnesota youth and adults, the results of which are reported here.

Our objective is to provide scientifically valid data on Minnesotans' knowledge, attitudes, and behaviors concerning smoking to support policy development, advocacy, and program planning. Our overarching goals are to help current smokers quit, prevent more people from starting, and protect all people from secondhand smoke.

This report provides information on quitting smoking for four groups of Minnesotans: the general population of adults, adult members of the Blue Plus MinnesotaCare program, adult members under age 65 of the Blue Plus Prepaid Medical Assistance Program (PMAP), and 9th- to 12th-grade public school students. The adult groups were surveyed during 1999 using the same questionnaire; students were surveyed with a separate questionnaire during 2000. (See *Appendix A for more information on survey methods.*) MinnesotaCare is a unique health insurance program subsidized by the state government for

low-income employed persons. PMAP is a Medicaid managed care program for low-income persons paid for by the state and federal governments. Many people eligible for these two programs elect to receive services through Blue Plus, a subsidiary of Blue Cross and Blue Shield of Minnesota, and this report focuses on these members. (See *Appendix B for more information about these groups.*)

Blue Plus MinnesotaCare and Blue Plus PMAP results are of special interest because low-income populations have high smoking rates and face disproportionate damage from tobacco use. These results may interest those involved in these programs, including the Minnesota Department of Human Services, state legislators, health plans, health care providers, and members.

This report focuses on cigarette smoking, describing people who consume only cigarettes or both cigarettes and other tobacco products. Twenty percent of adult Minnesotans smoke cigarettes. An additional 4 percent of Minnesotans use only other forms of tobacco. The survey collected less information about individuals using only these other tobacco products. Also, less is known about the effectiveness of medications and other methods that help people quit using these products. For these reasons, this report does not discuss use of other forms of tobacco.

SMOKING CAUSES DEATH AND DISEASE

In Minnesota and the United States, smoking is the leading cause of preventable death and disease. More than 800,000 Minnesotans of all ages smoke, and about one-third will die prematurely because of their addiction. Smoking causes approximately 17 percent of all Minnesota deaths each year (an estimated 6,400 deaths in 1995). Smoking causes cancer, heart disease, stroke, complications of pregnancy, and chronic obstructive pulmonary disease. While many Minnesota smokers will die prematurely, thousands more will suffer pain and disability because of tobacco dependence. In addition, many of their nonsmoking family members and co-workers will develop disease and die prematurely due to secondhand smoke exposure.

Smoking is addictive. More than 47 million American adults smoke cigarettes. Nearly 70 percent

want to quit. Although many people try, only 2.5 percent are able to quit permanently each year.

Despite public awareness of these health dangers, smoking remains prevalent in Minnesota and the United States. Data from this survey and from the Minnesota Department of Health indicate that 20 percent of adult Minnesotans smoke cigarettes; the national adult smoking rate (median for the 50 states, Puerto Rico, and the District of Columbia) is 22.7 percent. A troubling trend finds that adolescent smoking has risen dramatically. Approximately 15,000 Minnesota teens become new daily smokers each year. As a result, a new generation of Minnesotans has become dependent upon tobacco and is at risk for its harmful consequences. (See *page 16 for references.*)

MANY ADULT MINNESOTANS SMOKE

Twenty percent of Minnesota adults (age 18 or greater) reported that they were current cigarette smokers at the time of the 1999 statewide survey. Although this percentage is lower than the national median of 22.7 percent, it still represents more than 696,000 Minnesotans.

BLUE PLUS MINNESOTACARE AND BLUE PLUS PMAP

Smoking rates in these two lower-income populations were much higher than the rate in the general Minnesota adult population. Thirty-one percent of Blue Plus MinnesotaCare enrollees and 48 percent of Blue Plus PMAP members were current smokers at the time of the survey. While alarming, the higher smoking rates among these groups are not surprising since studies have shown repeatedly that groups with lower incomes tend to have substantially higher rates of smoking than those with higher incomes. These rates reflect a population of, on average, 166,000 non-disabled adults in Minnesota who were enrolled during 2000 in MinnesotaCare and PMAP at any point in time. This total may be compared to Minnesota's total population of approximately 3.6 million adults age 18 and above.

DEFINITIONS—ADULTS

A **current smoker** has smoked at least 100 cigarettes in his or her lifetime and now smokes every day or some days.

A **former smoker** has smoked at least 100 cigarettes in his or her lifetime but does not smoke now.

A **never smoker** has not smoked 100 cigarettes in his or her lifetime and does not smoke now.

FIGURE 1
Statewide adult smoking rates

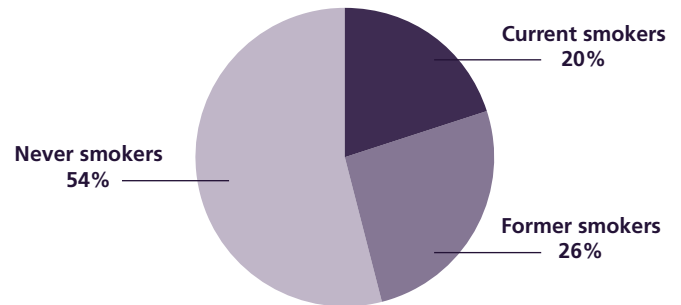


FIGURE 2
Blue Plus MinnesotaCare adult smoking rates

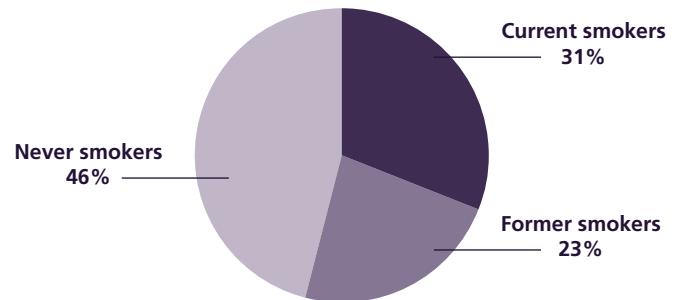
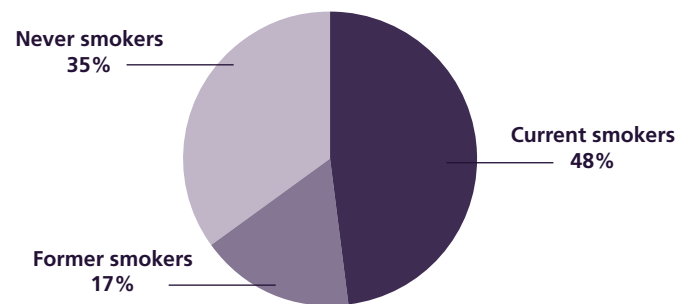


FIGURE 3
Blue Plus PMAP adult smoking rates



MANY ADULT SMOKERS TRY TO QUIT

Most adult smokers in Minnesota think seriously about quitting, and many try to do so. Among the current smokers, 63 percent—more than 435,000 people—indicated that they had reduced their smoking, and 46 percent—more than 317,000 people—reported that they had made at least one quit attempt within the 12 months before the survey. Since these respondents were all current smokers at the time of the survey, all of these quit attempts had failed.

Another way to describe interest in quitting is to characterize smokers in terms of their “stage of change” (see *Readiness to Quit*). The survey revealed that 43 percent of current smokers were in the contemplation stage of change. An additional 20 percent of current smokers were in the preparation stage. Only about a third of current smokers (37%) indicated that they were in precontemplation.

In addition, approximately 55,000 Minnesotans had quit within the six months before the survey. The risk of relapse was still high among these recent quitters.

BLUE PLUS MINNESOTACARE AND BLUE PLUS PMAP

Findings for the Blue Plus MinnesotaCare and Blue Plus PMAP populations were similar to the statewide population.

READINESS TO QUIT

Current smokers’ readiness to quit is often characterized in terms of five “stages of change.” We focus on three here:

Precontemplation: People not thinking of quitting smoking in the next six months.

Contemplation: People planning to quit in the next six months.

Preparation: People planning to quit in the next month who have also tried quitting recently.

The other two stages, **action** and **maintenance**, describe former smokers, who are not the focus of this section.

FIGURE 4
Reduced smoking and quit attempts among current adult smokers

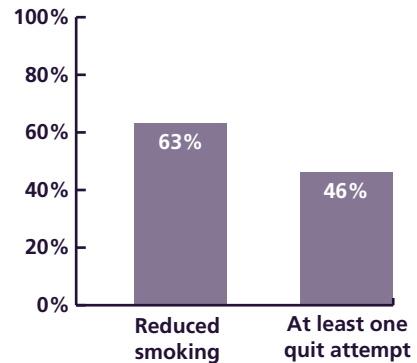
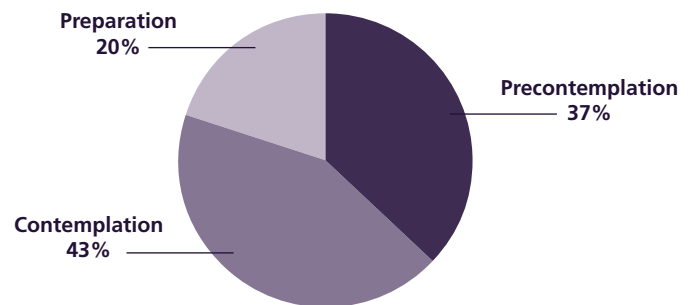


FIGURE 5
Current adult smokers’ readiness to quit



QUITTING IS DIFFICULT BECAUSE SMOKING IS ADDICTIVE

The highly addictive nature of cigarettes is well documented, and this is evident in the ongoing struggle of many smokers to quit. Of those current cigarette smokers who had tried to quit in the 12 months before the survey, 76 percent made multiple quit attempts. Twenty-five percent said that they had tried to quit six or more times in those 12 months, and that all those attempts had failed.

How addicted are cigarette smokers? Minnesota adult smokers reported that, on average, they smoke 15 cigarettes—three-quarters of a pack—every day. A widely-used measure of addiction is the amount of time after waking that a person waits to smoke his or her first cigarette of the day. Forty-six percent of Minnesota smokers indicated that they usually smoke their first cigarette within 30 minutes of waking, indicating a considerable level of addiction. Seventeen percent routinely smoke their first cigarette within five minutes of waking, an indication of an even greater level of addiction.

Not surprisingly, the level of a smoker's addiction to cigarettes affects the smoker's confidence in being able to quit. As shown in Figures 6 and 7, how soon after waking a person smokes his or her first cigarette and the average number of cigarettes smoked per day show a strong relationship to confidence in one's ability to quit smoking permanently. For instance, Figure 7 shows that 53 percent of light smokers (who smoke fewer than 15 cigarettes per day) said they were strongly confident that they would be able to quit smoking permanently if they decided to do so. But only 34 percent of moderate smokers (15 to 24 cigarettes per day) and 22 percent of heavy smokers (25 or more cigarettes per day) expressed that level of confidence in their ability to quit for good.

Former smokers' experience provides further testimony to the hold that nicotine exerts on people. Among Minnesota smokers who reported quitting within two years before the survey, one out of three (33%) said that they were not certain that they had quit permanently.

BLUE PLUS MINNESOTACARE AND BLUE PLUS PMAP

Findings for the Blue Plus MinnesotaCare and Blue Plus PMAP populations were similar to the statewide population.

FIGURE 6
Adults who smoke soon after waking have less confidence in their ability to quit permanently.

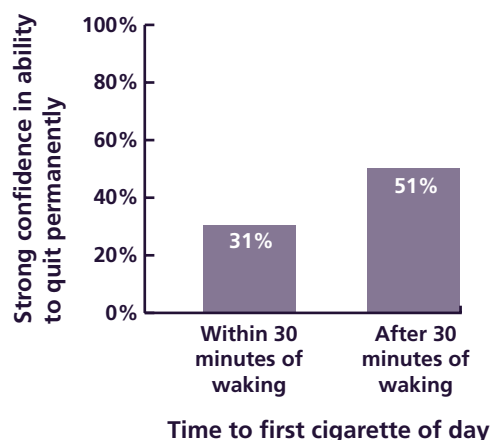
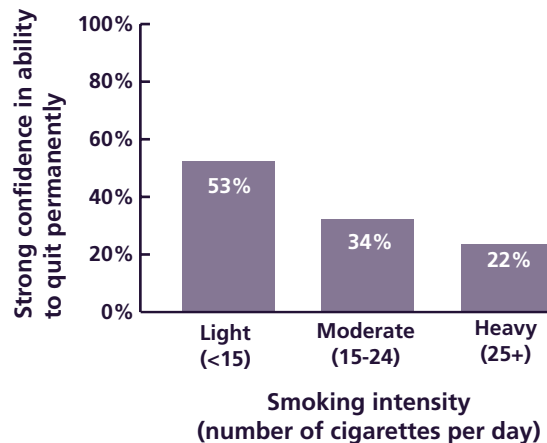


FIGURE 7
The more adults smoke, the less confidence they have in their ability to quit permanently.



MANY SMOKERS QUIT SUCCESSFULLY, FOR MANY REASONS

For many smokers, quitting is one of the most difficult things they ever do in their lives. Nevertheless, approximately 886,000 Minnesotans alive today have quit smoking. That represents 56 percent of all adult Minnesotans who have ever smoked, and 26 percent of the entire adult population of the state. What motivated these former smokers to quit?

Survey respondents reported a wide range of reasons:

- Information about the health hazards of tobacco
- A desire to be physically fit
- The smell, taste, or appearance of smoking
- Being a good example to one's children
- Testing one's willpower
- Encouragement from a friend
- The cost of tobacco

- Experiencing health problems linked to tobacco
- Knowing a relative or a friend with a tobacco-related illness
- Advice from a physician
- Restrictions on smoking at home
- Restrictions on smoking in one's workplace

Current smokers who tried to quit within the 12 months before the survey did not differ from former smokers in their motivations to quit. All of the above reasons were cited by at least one in five of these current smokers.

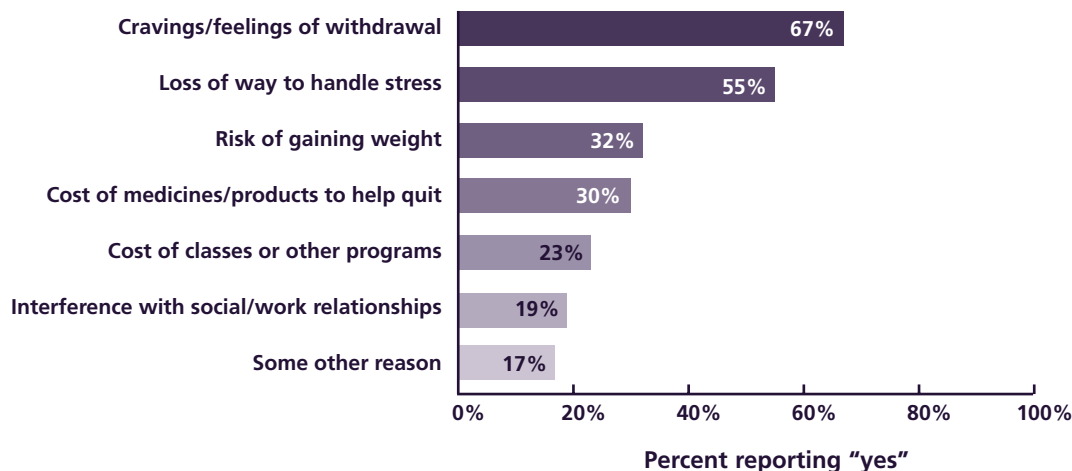
BLUE PLUS MINNESOTACARE AND BLUE PLUS PMAP
Findings for the Blue Plus MinnesotaCare and Blue Plus PMAP populations were similar to the statewide population.

THERE ARE MANY BARRIERS TO QUITTING SMOKING

Current smokers cited a complex set of barriers to their ability to quit. Two-thirds of current smokers (67%) listed physical cravings or feelings of withdrawal as a barrier, more than any other reason. Many smokers also identified social and psychological barriers, including losing a way to handle stress in their lives (55%), risk of gaining weight (32%), and concern about interference with social or work

relationships (19%). Finally, some smokers expressed concern over the cost of medicines or products (30%) and classes or other programs (23%) to help them quit. Many respondents identified multiple reasons, demonstrating that many smokers experience some combination of the physiological, social and psychological, and economic barriers identified here.

FIGURE 8
Current adult smokers identify many barriers to quitting.



Some groups experienced certain barriers more frequently. A far greater percentage of women (48%) than men (17%) cited the risk of gaining weight. Concern about the loss of cigarettes as a way to handle stress was listed as a barrier by 65 percent of women and 46 percent of men. A greater percentage of women (22%) than men (16%) identified the possible risk of interference with social or work relationships as a barrier to quitting.

Yet another type of barrier to quitting is the social environment. Smokers often live or socialize with other smokers, reinforcing smoking as a normative behavior. The survey revealed that current smokers were twice as likely as never smokers to have people who are close to them who also smoke. Among all adult Minnesotans, just 30 percent of never smokers said they had a spouse or close friend who was a current smoker, while 60 percent of current smokers said this.

BLUE PLUS MINNESOTACARE AND BLUE PLUS PMAP

Members of the Blue Plus MinnesotaCare and Blue Plus PMAP programs also experienced all of these barriers. However, these members reported the economic barriers more frequently. The cost of medicines or products to help with quitting was identified as a barrier by 30 percent of all current smokers statewide. By contrast, 50 percent of Blue Plus MinnesotaCare members who smoke, and 51 percent of Blue Plus PMAP smokers said cost was an issue. Similarly, 23 percent of all Minnesota smokers noted the cost of classes or other quit smoking programs as a barrier to quitting, compared to 33 percent of Blue Plus MinnesotaCare smokers and 34 percent of Blue Plus PMAP smokers.

The social environment is another barrier to members of these groups. For instance, in the Blue Plus PMAP population, 46 percent of those who had never smoked said they had a spouse or close friend who was a current smoker, and 70 percent of respondents who were current smokers said this.

PEOPLE TRYING TO QUIT SMOKING ARE INCREASINGLY SEEKING ASSISTANCE

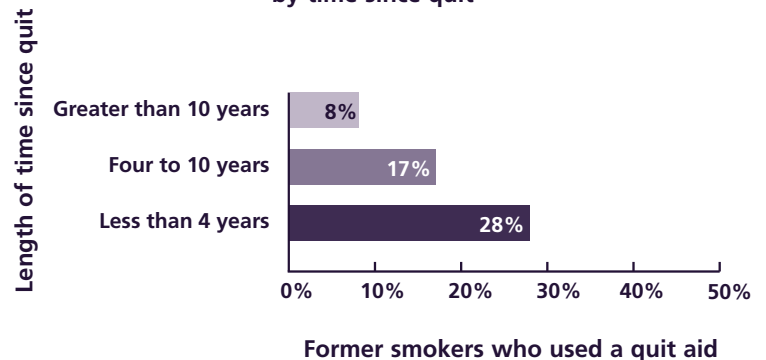
Faced with these many and complex barriers, smokers are increasingly seeking assistance from a growing array of products and services to help them quit. The majority of former smokers quit “cold turkey,” but the survey showed increasing use of assistance, in part reflecting the growing availability, marketing, and visibility of quit

smoking products in recent years. Only 8 percent of smokers who quit more than ten years before the survey used any of these aids. Of those who quit four to ten years before the survey, 17 percent used them. More than a quarter (28%) of smokers who quit in the three years prior to the survey used these products.

ASSISTANCE TO QUIT SMOKING INCLUDES

- Nicotine replacement products, including:
 - Gum
 - Patches
 - Nasal spray
 - Inhaler
- Zyban®, or other non-nicotine medication
- Books, pamphlets, and video or audio tapes
- Quit smoking classes or groups
- A quit smoking telephone helpline

FIGURE 9
Former adult smokers' use of quit aids by time since quit



Turning to current smokers, 36 percent of those who tried to quit at least once in the 12 months before the survey used some form of assistance in their most recent attempt. Further, when asked about their interest in using assistance “if cost were not an issue,” 60 percent of all current smokers responded that they would use assistance if they were trying to quit.

At the time of the survey, current smokers expressed the greatest interest in nicotine replacement products (75%), such as patches, gum, nasal spray, and inhalers, and in Zyban (67%), to help them quit. Both nicotine replacement products and non-nicotine medication have been shown to reduce the cravings and withdrawal symptoms that smokers cited as a major barrier to quitting.

Minnesota’s current smokers also showed great interest in materials or services designed to help with the social and psychological barriers to quitting. Again, “if cost were not an issue,” substantial numbers of smokers in Minnesota said they would turn for assistance to: books, pamphlets or tapes (33%), quit smoking classes or groups (31%), quit smoking telephone helplines (22%), or something else (28%). The interest in telephone helplines is likely even greater now because these services became widely available in Minnesota after the completion of this survey. Women expressed a slightly higher interest than men in these types of services.

BLUE PLUS MINNESOTACARE AND BLUE PLUS PMAP

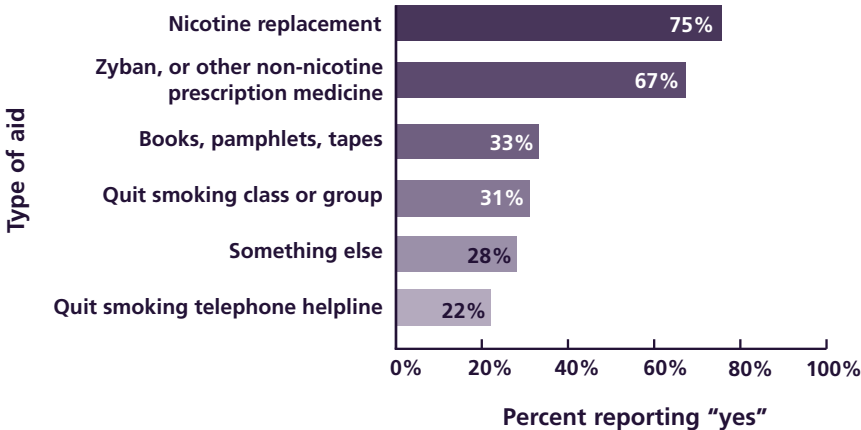
Interest in assistance among current smokers in the Blue Plus MinnesotaCare and Blue Plus PMAP groups was similar to the Minnesota population. However, even higher proportions of these smokers said that, “if cost were not an issue,” they would be interested in help when they want to quit. Seventy-two percent of Blue Plus MinnesotaCare members and 71 percent of Blue Plus PMAP members said they were interested in these products and services.

COVERAGE FOR QUIT SMOKING AIDS IN MINNESOTA

Most health plans in Minnesota provide benefit coverage for all or some quit smoking medications for their fully insured members (those for whom health plans can design the benefits set), as well as most people enrolled in the MinnesotaCare and PMAP. Nevertheless, the perception that these forms of assistance are not covered by health insurance represents a real barrier to many smokers.

Please see page 11 for a description of some available resources for quitting smoking in Minnesota.

FIGURE 10
Types of aid preferred by current adult smokers' who would use assistance "if cost were not an issue"



MANY TEENS IN MINNESOTA SMOKE

The Minnesota Youth Tobacco Survey (MYTS), conducted in early 2000 by the Minnesota Department of Health, found that 32 percent of high school students (grades 9-12) were current smokers. Boys and girls were equally likely to be current cigarette smokers.

The MYTS showed that 17 percent of high school students were frequent smokers (i.e., have smoked on 20 or more of the past 30 days) and 15 percent were moderate smokers (i.e., have smoked on 1-19 of the past 30 days).

DEFINITIONS—TEENS

A **teen smoker** has smoked cigarettes on one or more of the past 30 days.

Because teen and adult smokers are defined differently, prevalence rates should *not* be compared between the youth and adult surveys.

MOST TEEN SMOKERS WANT TO AND HAVE TRIED TO QUIT

The MYTS revealed that nearly two-thirds of all current high school smokers would like to quit smoking cigarettes, and 61 percent of all current high school smokers tried unsuccessfully to quit at least once in the past year. Further, of those who tried to quit in the past year, nearly three-fourths

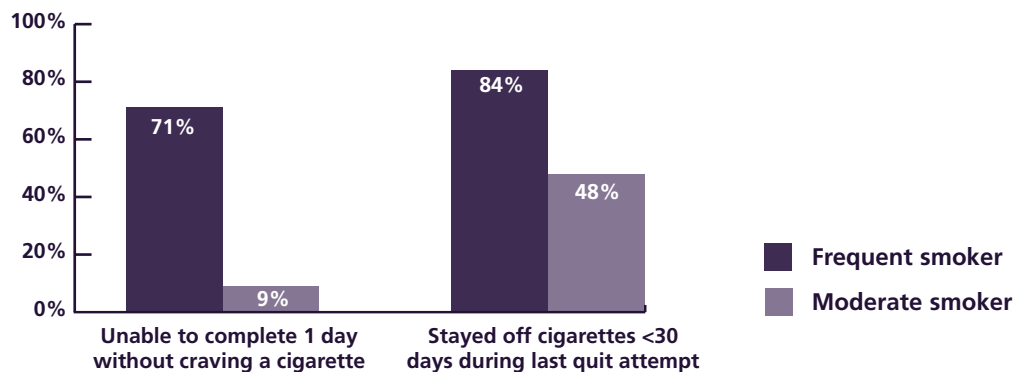
attempted to quit two or more times. However, teen smokers who want to quit have likely been underexposed to quitting programs and aids. Only 10 percent of current high school smokers reported ever participating in a program to help them quit using tobacco.

QUITTING IS ESPECIALLY DIFFICULT FOR TEENS WHO ARE FREQUENT SMOKERS

Although both moderate and frequent high school smokers reported difficulty when attempting to quit smoking, the difficulty encountered was particularly striking for those youth who were frequent smokers. Speaking to the highly addictive nature of nicotine, 71 percent of frequent high school smokers said they were unable to get through an entire day without

feeling they “needed a cigarette,” in contrast to only 9 percent of moderate smokers. Additionally, frequent smokers (84%) were more likely than moderate smokers (48%) to begin smoking again within 30 days after their last quit attempt.

FIGURE 11
Frequent high school smokers encounter greater difficulty than moderate smokers when trying to quit.



FAMILY AND FRIENDS WHO SMOKE MAKE IT HARDER FOR TEENS TO QUIT

The social environment that surrounds almost all teen smokers serves as a major barrier to their desire and ability to quit. Among frequent high school smokers, 61 percent reported living with someone who smokes, compared to only 27 percent of high

school students who have never smoked. This dynamic was apparent to an even greater extent with peers—90 percent of frequent smokers have two or more close friends who smoke, in sharp contrast to only 13 percent of those who have never smoked.

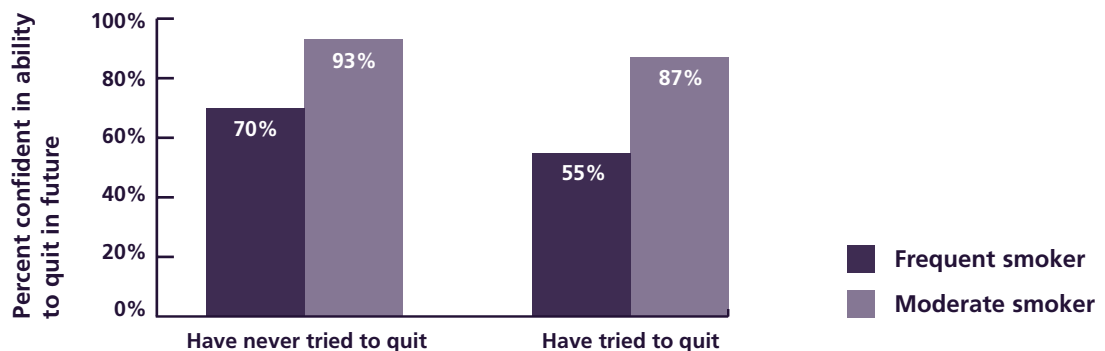
FREQUENT TEEN SMOKERS WITH FAILED QUIT ATTEMPTS ARE THE LEAST CONFIDENT ABOUT QUITTING

As addiction takes hold, teen smokers' level of confidence in their ability to quit smoking declines. For example, among current teen smokers who have never tried to quit, frequent smokers reported lower confidence in their ability to quit in the future, compared to moderate smokers (70% vs. 93%). Further, among current teen smokers who have tried to quit but failed, only 55 percent of frequent smokers were confident that they could quit in the future, as opposed to 87 percent of moderate smokers. Thus, frequent teen smokers who have made unsuccessful quit attempts in the past appear best able to attest to the difficulty associated with quitting smoking.

Such difficulties can likely be successfully addressed by making various forms of quit aids more readily available to adolescent smokers and by tailoring the quit assistance to match the unique habits and needs of youth smokers.

Indeed, current youth smokers should be advised to continue trying to quit and reminded that quitting often requires several failed attempts before achieving long-term abstinence. The fact that one or more quit attempts have been initiated represents the first big step on the road to quitting smoking for good.

FIGURE 12
Frequent high school smokers, especially those with prior quit attempts, less often expressed confidence than moderate smokers in their ability to quit smoking.



QUITTING ASSISTANCE NOW WIDELY AVAILABLE TO MINNESOTANS

ADULTS

Despite the many barriers and negative public health trends discussed in this report, there is also good news. Effective treatments to quit smoking, including certain medications and behavioral counseling, are now widely available in Minnesota. Evidence from research studies shows that a combination of behavioral and pharmacological therapy—considered the optimal treatment—can substantially improve the chances that smokers who want to overcome their addiction to cigarettes will succeed. The evidence from this report demonstrates expanding use of and broad interest in these medications and services among Minnesotans who smoke.

Effective medications include: nicotine replacement therapy (such as patches, gum, nasal spray, and inhalers) and Zyban, a non-nicotine medication. Most health plans in Minnesota provide benefit coverage for all or some of these medications for their fully insured members (those for whom health plans can design the benefits set), as well as for most people enrolled in the MinnesotaCare and PMAP. People with health insurance can call the phone number on the back of their health plan identification card to find out about their benefit coverage.

Telephone-based quit smoking assistance lines are also effective, and have become widely available in Minnesota since the time these surveys were conducted. All Minnesotans can call Minnesota's Tobacco Helpline (1-877-270-STOP) and receive quit smoking assistance. If callers have health insurance coverage they are transferred to their health plan-run quit line. Blue Cross and Blue Shield of Minnesota members can call the BluePrint for Health® stop-smoking program directly (1-800-835-0704).

Counseling provided by health care professionals is another effective support for people interested in quitting. When clinicians follow the “5A’s” by routinely asking, advising, assessing, assisting, and

arranging follow-up care for tobacco users, they can increase their patients' long-term quit rates. Based on evidence from many studies, the U.S. Department of Health and Human Services' guideline on treating tobacco use and dependence states that clinicians can achieve quit rates from 18 percent (advice from one provider) to 23 percent (advice from multiple providers). In addition, evidence shows that longer counseling sessions produce more successful treatment outcomes. Counseling sessions of three minutes or less can produce abstinence rates of 13 percent, while sessions of longer than ten minutes can produce abstinence rates of 22 percent. Over time and across a population of patients, these approaches can add up to a significant decrease in the smoking rate.

TEENS

There is a growing awareness that adolescents, as well as adults, need effective quit smoking assistance. However, relatively few quit smoking interventions for teens have been specifically developed and rigorously evaluated. Teens may benefit from assistance from their health care provider or from telephone-based counseling. Physicians can prescribe certain quit smoking medications, depending on a number of factors, including assessment of the teen's level of addiction and physiological factors. In addition, effective quit smoking assistance for teens may include innovative approaches tailored to the unique needs of adolescents (e.g., community- or school-based programs; involvement of peers). At this time, the field awaits evidence-based outcomes that will provide appropriate guidelines and direction for quit smoking treatments for teens.

Minnesota has made progress in increasing access to effective quit smoking medications and counseling. We hope this report will lead to even greater access and use of effective methods of quitting smoking.

APPENDIX A: METHODS

ADULT TOBACCO SURVEY

The data in this collaborative report were gathered from adults age 18 and older from three different samples using the same survey instrument. Phone interviews were conducted during the spring and summer of 1999. All respondents were assured of the confidentiality of their individual responses.

Responses were weighted to represent adults in the population from which the sample was selected. Demographic characteristics vary among the three adult study populations, in part reflecting the eligibility requirements for participation in the publicly funded health insurance programs.

- *Statewide Sample*

MPAAT sampled Minnesotans living in six geographic regions in the state. Residential telephone numbers were randomly selected within each region, and an adult household member living at each residence was randomly selected to respond to the survey. Approximately 1,000 telephone surveys were completed in each region for a total statewide sample of 6,000 surveys.

- *Blue Plus Samples*

The Blue Plus samples described in this report (members enrolled in MinnesotaCare or PMAP) are part of a larger random sample survey of approximately 10,000 Blue Cross members. Many people who are eligible for MinnesotaCare and PMAP elect to receive services through Blue Plus, a subsidiary of Blue Cross and Blue Shield of Minnesota. This report includes information only from the 18- to 64-year-old members of Blue Plus MinnesotaCare (994 completed surveys) and Blue Plus PMAP (689 completed surveys) samples. Blue Plus members were alerted to the survey by letter before being called and were offered the opportunity to decline participation.

Comparison with the entire state's MinnesotaCare and PMAP eligible populations demonstrated that the Blue Plus samples closely mirror their respective statewide populations on age, gender, and proportion of households with children under age 18. However, the Blue Plus samples substantially underrepresented MinnesotaCare and PMAP membership in the seven-county Twin Cities metropolitan area.

- *Data Limitations*

As with any telephone survey, these samples underrepresent households that do not have a telephone (2% of Minnesota's households). Minority ethnic populations and populations of color in Minnesota are likely to be underrepresented in these surveys for other reasons as well, including cultural or language barriers to completing the survey. All of the results in this report were self-reported and may be subject to biases introduced in the interview process. However, most measures used in these surveys have been extensively tested and are believed to be highly reliable.

YOUTH TOBACCO SURVEY

The Minnesota Department of Health conducted the Minnesota Youth Tobacco Survey (MYTS) to obtain information on the prevalence of tobacco use, attitudes and beliefs about tobacco use, and other topics of interest to tobacco prevention efforts. The U.S. Centers for Disease Control and Prevention contributed most of the questions used in the survey instrument. The survey was administered in January,

February, and March 2000. Careful measures were taken to protect the anonymity and confidentiality of students' responses. Individual responses were weighted to represent the public school 6th- to 12th-grade population in Minnesota. For this report, we present data on high school students only (grades 9-12).

- *MYTS Sample*

Participants were selected from 46 middle schools and 57 high schools that were randomly selected and had agreed to participate. Five or six classrooms within each school were randomly selected, and all students in these classrooms were asked to participate. Survey responses were received from 12,376 students.

- *Data Limitations*

As with most school-based surveys, the sample underrepresents school dropouts, students who frequently miss school, and students in juvenile institutions, treatment centers, and some alternative schools.

- *Note on Definition of a Smoker*

The definition of a current smoker differs between the youth and adult surveys. Therefore, prevalence rate comparisons should not be made between the youth and adult surveys.

APPENDIX B: PROFILE OF CURRENT AND FORMER ADULT SMOKERS

Table 1 displays the demographic characteristics of the current and former smokers described in this report. In the statewide population, more of these smokers lived in the seven-county metro area than in rural areas, reflecting the general population pattern. More men than women were current and former smokers. The average age was 39 years old for current smokers and 52 years old for former smokers. Almost twice as many former smokers (34%) as current smokers (18%) reported having a college degree. Over twenty percent (21%) more former smokers than current smokers were married. These differences in education and marital status in part reflect the age difference between the two groups.

BLUE PLUS MINNESOTACARE AND PMAP

While the same patterns exist between current and former smokers, the Blue Plus MinnesotaCare and PMAP populations differed from the state population in several ways. The members more likely lived in rural areas (due to the nature of the Blue Plus population described in Appendix A of this report). The Blue Plus MinnesotaCare and PMAP members were more often female and younger as well as much less likely to have a college degree. While the members of the Blue Plus MinnesotaCare population were similar to the state on marital status, the members of the Blue Plus PMAP population were much less likely to be married.

TABLE 1
Profile of current and former adult smokers

| | STATEWIDE | | BLUE PLUS MINNESOTACARE | | BLUE PLUS PMAP | |
|----------------------------------|-----------------|----------------|-------------------------|----------------|-----------------|----------------|
| | Current smokers | Former smokers | Current smokers | Former smokers | Current smokers | Former smokers |
| Geographic Area | | | | | | |
| Greater Minnesota | 49% | 46% | 99% | 96% | 78% | 87% |
| Seven-county metro area | 51% | 54% | 1% | 4% | 22% | 13% |
| Gender | | | | | | |
| Female | 46% | 46% | 55% | 56% | 74% | 73% |
| Male | 53% | 54% | 45% | 44% | 26% | 27% |
| Average age (years) | 38.7 | 51.7 | 34.6 | 37.9 | 30.7 | 31.9 |
| Education | | | | | | |
| Less than high school | 10% | 7% | 19% | 11% | 22% | 14% |
| High school graduate/GED | 38% | 31% | 50% | 55% | 46% | 43% |
| Some college or technical school | 34% | 28% | 28% | 29% | 24% | 35% |
| College graduate and above | 18% | 34% | 4% | 6% | 8% | 7% |
| Married | 50% | 71% | 51% | 71% | 21% | 41% |

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COLLABORATING ORGANIZATIONS

THE MINNESOTA PARTNERSHIP FOR ACTION AGAINST TOBACCO (MPAAT) is an independent, nonprofit, public foundation dedicated to reducing the harm caused by tobacco. MPAAT's goal is to transform the social environment through intervention and research to reduce tobacco use in Minnesota to less than 10 percent by the year 2023. To achieve this goal, MPAAT will serve Minnesota over a 25-year period through grants to health, community, and academic organizations throughout the state in support of research, intervention, and related program activities. MPAAT is funded by proceeds from the Minnesota tobacco settlement through payments ordered by the courts for the harm tobacco caused Minnesotans.

BLUE CROSS AND BLUE SHIELD OF MINNESOTA (Blue Cross) is the first and only health care plan to date to win a legal battle against the tobacco industry. Blue Cross' 1994 lawsuit against Big Tobacco resulted in unprecedented public gains, open access

to secret tobacco industry documents, and a settlement that will reduce tobacco use and improve the health of Minnesotans for many years to come. With headquarters in the St. Paul suburb of Eagan, Blue Cross covers more than two million members through its health plans or plans administered by its affiliated companies. It is Minnesota's oldest health plan and began operations in 1933. Blue Plus, a subsidiary of Blue Cross and Blue Shield of Minnesota, provides managed care programs for commercially insured populations and for the MinnesotaCare program and Prepaid Medical Assistance Program (PMAP).

THE MINNESOTA DEPARTMENT OF HEALTH works to protect, improve, and maintain the health of all Minnesotans. The Department has launched an energetic campaign of youth-inspired marketing, youth organizing activities, and statewide and local programs to significantly reduce youth tobacco use over the next five years.

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