Substance Abuse and Mental Health Services Administration
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Tobacco Use Cessation During Substance Abuse Treatment Counseling

Smoking tobacco causes more deaths among clients in substance abuse treatment than the alcohol or drug use that brings them to treatment. A seminal 11-year retrospective cohort study of 845 people who had been in addictions treatment found that 51 percent of deaths were the result of tobacco-related causes.[1] This rate is twice that found in the general population and nearly 1.5 times the rate of death by other addiction-related causes. Despite these statistics, most substance abuse treatment programs do not address smoking cessation.

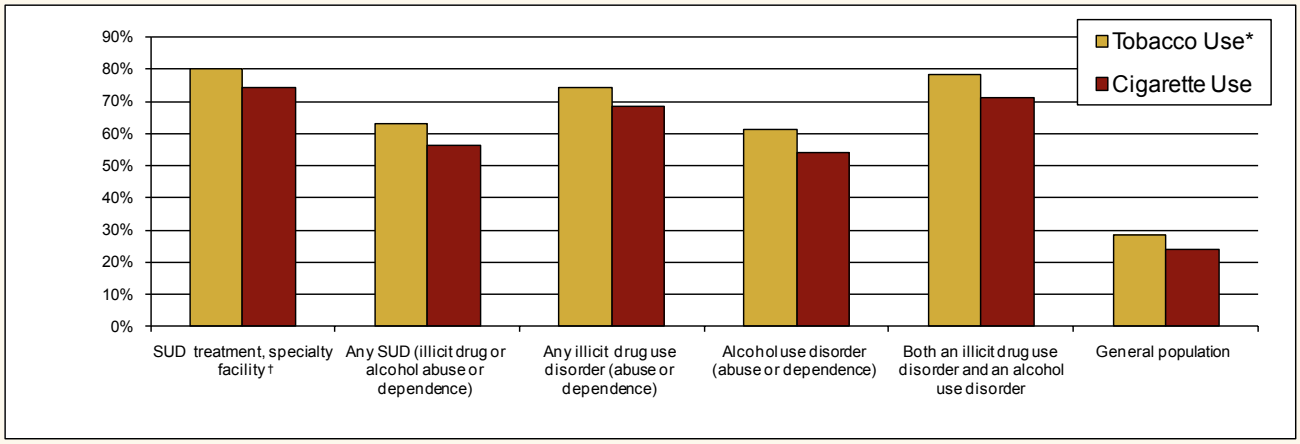
Many people have already successfully quit using tobacco. For example, according to the National Health Interview Survey of U.S. households conducted by the Centers for Disease Control and Prevention (CDC) in 2008, "Of the estimated 94 million persons who had smoked at least 100 cigarettes during their lifetimes, 51.1 percent (48.1 million) were no longer smoking at the time of the interview."[2]

Although the focus of this *Advisory* is on cessation of smoked tobacco, many of the cessation methods are also applicable to smokeless tobacco such as snuff or chewing tobacco because they address addiction to nicotine, the addictive substance in tobacco. This *Advisory* offers substance abuse treatment counselors a brief introduction to tobacco use cessation during substance abuse treatment. Counselors who would like additional information on the topic are encouraged to consult the Resources for Additional Information section on page 7. Administrators of treatment facilities can find additional information in the *Advisory* Tobacco Use Cessation Policies in Substance Abuse Treatment: Administrative Issues.[3]

Tobacco Use Among Substance Abuse Treatment Clients

Clients entering treatment for a substance use disorder (SUD) are more likely to be dependent on nicotine than are members of the general public. Seventy-five percent of people ages 12 and older

Exhibit 1. Tobacco Use in the Past Month, People Ages 12 and Older, 2008



*Tobacco products include cigarettes, smokeless tobacco (i.e., chewing tobacco and snuff), cigars, or pipe tobacco.

†Refers to treatment received at a hospital (inpatient), rehabilitation facility (inpatient or outpatient), or mental health center to reduce or stop illicit drug or alcohol use or for medical problems associated with illicit drug or alcohol use.

Source: Office of Applied Studies. (2008). National Survey on Drug Use and Health, unpublished data. Rockville, MD: Substance Abuse and Mental Health Services Administration.

who received substance abuse treatment at a specialty facility in the past year reported smoking cigarettes in the past month, compared with 24 percent of the general population (see Exhibit 1, page 1). Fifty-four percent of those ages 12 and older who reported alcohol abuse or dependence in the past year reported smoking cigarettes. Data show that 63 percent of people ages 12 and older with any SUD (illicit drug and/or alcohol abuse or dependence) in the past year also reported tobacco use in the past month, compared with 28 percent of the general population.

Health Effects of Tobacco Use

The detrimental effects of tobacco use are well documented. From 2000 to 2004, cigarette smoking and exposure to secondhand smoke resulted in at least 443,000 premature deaths each year and $96.8 billion in productivity losses annually in the United States.[4] From 2001 to 2004, smoking-related healthcare costs were $96 billion annually. Tobacco use is the leading cause of preventable disease and deaths in the United States.[5] It can cause diseases of the lungs and cardiovascular system as well as many cancers.

Health Benefits of Tobacco Use Cessation

The most important effects of tobacco use cessation are the immediate and long-term beneficial health changes:[6]

- Cigarette smoking accelerates age-related decline in lung function. However, with sustained abstinence from smoking, the rate of decline in pulmonary function returns to that of people who never smoked.
- Smoking cessation reduces rates of cough, productive cough, and wheezing, as well as respiratory infections such as bronchitis and pneumonia, compared with rates among people who continued smoking.
- After 1 year, the risk of coronary heart disease (CHD) is half of that of a person who smokes. After 15 years of abstinence, risk of CHD is similar to that of persons who have never smoked.
- After several years, stroke risk is reduced to that of a person who has never smoked.
- After 10 years of abstinence, the lung cancer death rate is about 30 to 50 percent of the risk of people who continue to smoke.
- The risks of mouth, throat, esophagus, bladder, cervix, and pancreatic cancers also decrease.

A more recent report endorses the findings of the 1990 study.[5]

Symptoms of Nicotine Withdrawal

Nicotine withdrawal symptoms are similar to those of other substances and to the symptoms of some behavioral health disorders. Some symptoms include:[7]

- An intense craving for nicotine.
- Tension, irritability, frustration.
- Mild depression, reduced ability to experience pleasure (anhedonia), dysphoria.
- Anxiety.
- Anger.
- Restlessness, difficulty concentrating.
- Increased appetite.

Acute physiological nicotine-related withdrawal symptoms usually peak 24 to 48 hours after a person quits and diminish within a matter of weeks. The physiological cravings for nicotine usually last about 7 days but psychological cravings frequently last longer. Other psychological symptoms, such as mild depression and anhedonia, can last months to years.[7] Counselors should be prepared to assess all possible causes of these symptoms for clients who stop using tobacco.

Counselors Can Treat Nicotine Addiction

Treatment for nicotine dependence requires screening, assessing for readiness to change tobacco use behavior, and intervention. Counselors should ask clients who smoke or use other tobacco products about their interest in quitting while in substance abuse treatment.[8]

Screening, brief intervention, and referral to treatment (SBIRT) for tobacco use cessation can be used. The National Institute on Drug Abuse has two valuable

resources on SBIRT for tobacco use cessation, *Resource Guide: Screening for Drug Use in General Medical Settings* and *Screening Tool Quick Reference Guide*, available at http://www.drugabuse.gov/nidamed/; the latter resource includes a screening tool, information on providing feedback to clients, and information on brief interventions.

The Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) is a useful tool to screen for

Pregnant Women

In addition to jeopardizing a woman's health, smoking during pregnancy can disrupt fetal development. Smoking is linked to stillbirth, premature labor, low birth-weight, sudden infant death syndrome, and other conditions. In addition, cognitive, emotional, and behavioral problems in children are associated with a woman's smoking during pregnancy.

Some pregnant women may conceal their smoking or not admit that they smoke, but this information can be obtained in an assessment, particularly through multiple-choice rather than yes/no questions. The Surgeon General provides the following example of a question to ask to assess a pregnant woman's addiction to nicotine:

Which statement best describes your cigarette smoking?

- I smoke regularly now; about the same as before finding out I was pregnant.
- I smoke regularly now, but I've cut down since I found out I was pregnant.
- I smoke every once in a while.
- I have quit smoking since finding out I was pregnant.
- I wasn't smoking around the time I found out I was pregnant, and I don't currently smoke cigarettes.

The effectiveness of nicotine replacement therapy (NRT) in pregnant women is inconclusive. Some effective interventions in pregnant women include providing health education, tips for quitting, self-help literature—especially literature written for pregnant women—and telephone counseling.

The Public Health Service Clinical Practice Guideline recommends the following to help pregnant women quit smoking:

- Motivate quit attempts by providing educational messages about the impact of smoking on both maternal and fetal health.
- Give clear, strong advice to quit as soon as possible. Explain that quitting early in pregnancy provides the greatest benefit to the fetus.
- Use problemsolving counseling methods and provide social support.
- Arrange for followup assessments throughout pregnancy, including encouraging smoking cessation.
- In the early postpartum period, assess for relapse and be prepared to continue or reapply tobacco use cessation interventions, recognizing that women may deny smoking.

Web resources created specifically for pregnant women include the following:

- The National Partnership for Smoke-Free Families has an array of handouts, assessment forms, posters, and other resources to help pregnant women stop smoking. A curriculum designed by and for Native Americans, including facilitator and participant guides, is also available (http://smokefreefamilies.tobacco-cessation.org/).
- Smokefree.gov offers several free publications, including *Forever Free for Baby and Me*, for pregnant women who have recently quit smoking (http://women.smokefree.gov/landing.aspx?rid=4).
- The National Association to Help Pregnant Smokers Quit has tips for smokers, booklets in English or Spanish, and other free materials that can be downloaded (http://www.helppregnantsmokersquit.org).
- Campaign for Tobacco-Free Kids provides a fact sheet on smoking and pregnancy (http://www.tobaccofreekids.org/research/factsheets/pdf/0288.pdf).
- CDC has additional information and publications on pregnancy and smoking (http://www.cdc.gov/reproductivehealth/tobaccousepregnancy/index.htm/).

Based on Fiore, M. C., Jaén, C. R., Baker, T. B., Bailey, W. C., Benowitz, N. L., Curry, S. J., et al. (2008). *Treating tobacco use and dependence: 2008 update*. Clinical Practice Guideline. Rockville, MD: Public Health Service, U.S. Department of Health and Human Services.

Weight Gain

For some people, the fear of gaining weight can be a barrier to quitting. The decreased metabolism that follows stopping tobacco use, combined with increased appetite, means that most people gain weight. Most people gain fewer than 10 pounds. NRT, particularly gum and lozenges, and bupropion sustained release (SR) may help delay (but not prevent) weight gain. Counselors should not minimize the likelihood of gaining weight or the difficulty in losing the added weight later. They should acknowledge these issues but emphasize that the weight gain poses a minimal health risk compared with the risk of continuing to smoke. Clients should be encouraged to lead a healthful lifestyle that includes attention to nutrition and exercise. Nutritional counseling may be helpful.

Based on Fiore, M. C., Jaén, C. R., Baker, T. B., Bailey, W. C., Benowitz, N. L., Curry, S. J., et al. (2008). *Treating tobacco use and dependence: 2008 update.* Clinical Practice Guideline. Rockville, MD: Public Health Service, U.S. Department of Health and Human Services.

tobacco use; ASSIST is available at http://www.who.int/substance_abuse/activities/assist_v3_english.pdf. Treatment Improvement Protocol 45: *Detoxification and Substance Abuse Treatment* includes information on screening and assessment instruments and tools to measure severity of nicotine dependence and to assess medical complications of tobacco use.[9]

Assessments for tobacco use should obtain information on previous quit attempts, use of nicotine use cessation medications and their effectiveness, and the circumstances leading to relapse to tobacco use. This information can be used to make specific treatment plans and help the client develop responses to relapse triggers. It also helps counselors determine the need for a more intensive intervention.

Some American Indian/Alaska Native populations use tobacco in ceremonies, so a yes/no question about tobacco use may not give the counselor enough information with which to determine whether the client is nicotine dependent, and further assessment will be needed.

Once clients have expressed a desire to quit using tobacco, counselors and clients determine the "when" and "how" and include this information in the substance abuse treatment plan. All cessation programs recommend setting a quit date. The quit date should be, at the latest, within 2 weeks of the decision to quit so that clients remain motivated.

The Five A's of intervention[8] summarizes the approach counselors can take when encouraging clients to quit smoking while in substance abuse treatment (Exhibit 2). It is most important to ask all clients whether they use tobacco and to determine whether they would like to quit while in treatment.

Exhibit 2. The Five A's of Intervention

A	Intervention
Ask about tobacco use.	Identify and document tobacco use status for every client at every visit.
Advise to quit.	In a clear, strong, and personalized manner, urge every client who uses tobacco to quit.
Assess willingness to make a quit attempt.	Ask about willingness to attempt to quit during substance abuse treatment.
Assist in quit attempt.	For the willing client, explain nicotine use cessation medication options and refer the client to a health professional, if necessary. Help the client determine the quit date. Provide counseling to help the client quit. Provide additional information such as quitlines. For clients unwilling to quit at this time, provide interventions to increase future quit attempts.
Arrange followup.	For the client willing to quit, include smoking cessation in the substance abuse treatment plan and discuss tobacco use cessation at every counseling session, beginning within the first week after the quit date. For the unwilling client, address tobacco dependence and willingness to quit at all counseling sessions.

Based on Fiore, M. C., Jaén, C. R., Baker, T. B., Bailey, W. C., Benowitz, N. L., Curry, S. J., et al. (2008). *Treating tobacco use and dependence: 2008 update.* Clinical Practice Guideline. Rockville, MD: Public Health Service, U.S. Department of Health and Human Services.

Effective Treatment Approaches to Tobacco Use Cessation

Quitting is difficult, and most people benefit from assistance.[8] Counseling and nicotine use cessation medications are the primary approaches used in smoking cessation, and these approaches are often combined. Quitlines are also a valuable resource for people who want to quit using tobacco. Internet assistance (http://www.smokefree.gov) can be helpful. Research has not identified a tobacco use cessation method (the "how") that works best for everyone, and treatment needs to be individualized. Some treatments, such as hypnosis and acupuncture, have not been shown to be effective.[8]

Tobacco use cessation support can be included as followup care in the discharge plan. Support can include telephone calls by the counselor, extended counseling, or continued connection to smoking cessation support including prescribed medications.

Counseling

Exhibit 3 lists two counseling approaches that help people stop tobacco use. Training in specific nicotine use cessation counseling techniques to help clients quit using tobacco is available for substance abuse counselors (see Training Resources for Smoking Cessation on page 7). If a treatment program cannot offer counseling or medication to treat nicotine addiction, it can still encourage and support clients in their attempts to quit, such as by referring clients to quitlines. Teaching coping skills that help clients deal with cravings for the primary substance being treated in the program also may be helpful for tobacco use cessation. Asking clients about how they are coping with tobacco cravings and about withdrawal symptoms may help clients feel supported.

Tobacco Use Cessation Quitlines

Quitlines and online help, such as 1-800-QUIT NOW and http://www.smokefree.gov, provide assistance to people who want to cease tobacco use. Telephone quitlines provide support from trained counselors and are currently available in all 50 States and the District of Columbia. 1-800-QUIT NOW is a portal telephone number that transfers callers to the State quitline.

Although quitline services vary by State, in general, quitlines screen callers for their needs, mail the callers educational materials, and connect callers to trained specialists who develop a plan to quit and provide followup support in the form of callbacks from quitline counselors. In some States, quitlines provide access to nicotine use cessation medications. Many quitlines offer services in languages other than English. More information is at http://www.naquitline.net/flash//map_world/map_world.html.

Exhibit 3. Effective Tobacco Use Cessation Counseling Approaches

Approach	Action
Practical counseling	Teach problemsolving and relapse prevention skills (e.g., recognizing and coping with cues that could precipitate relapse to tobacco use). Provide skills training (e.g., coping skills, anger management, lifestyle changes, relaxation techniques). Provide basic information about the harmful effects of tobacco, the benefits of quitting, and nicotine withdrawal symptoms.
Supportive counseling	Provide support in the treatment program or by referral to a smoking cessation program. Provide encouragement. Give examples of success stories. Communicate caring and concern.

Based on Fiore, M. C., Jaén, C. R., Baker, T. B., Bailey, W. C., Benowitz, N. L., Curry, S. J., et al. (2008). *Treating tobacco use and dependence: 2008 update*. Clinical Practice Guideline. Rockville, MD: Public Health Service, U.S. Department of Health and Human Services.

Tobacco Use Cessation Medications

Clients willing to quit nicotine use can be referred to a medical professional who can assess for the need for tobacco use cessation medications. Not all people benefit from these medications. For example, these medications have not been shown to be effective for adolescents or people who smoke fewer than 10 cigarettes a day.[8] Several Food and Drug Administration (FDA)-approved prescription medications and over-the-counter (OTC) treatments are available to treat nicotine addiction. These medications have proved to be effective. Exhibit 4 presents information on tobacco use cessation medications.

SUD treatment programs can contact local or State health departments to find out whether nicotine use cessation medications can be provided for clients at no or low cost. For example, the Community Tobacco Cessation Partnership in King County, Washington, provides free NRT for its partner health providers' clients, including those in SUD and behavioral health treatment centers.[10] In addition, the Partnership provides training on best practices for treating tobacco use and dependence. Clients in many States may also be eligible for free or discounted tobacco use cessation medication through their States' quitlines; eligibility varies by State. The Web site http://www.smokefree.gov provides information about and links to services in specific areas. Clients may also be eligible to receive these medications if they are covered by Medicaid, depending on the State formulary.

Clients Who Do Not Want To Quit

Clients should be asked about their tobacco use whenever their SUD treatment plan is reviewed. Clients who do not want to quit smoking need to be reassessed periodically to determine whether their readiness to quit has changed. Conversations about tobacco use can address client ambivalence or resistance. Motivational interviewing can help move clients toward attempting to quit. The Five R's also may be useful with clients resistant to quitting:[8]

- **Relevance**—help the client recognize reasons why quitting is personally relevant, such as health concerns, effects of second-hand smoke on others, or cost of smoking.

Exhibit 4. Effective Tobacco Use Cessation Medications

FDA-Approved Medication	Special Issues
First-line prescription and OTC NRT* medications: • Nicotine nasal spray (prescription) • Nicotine inhaler (prescription) • Nicotine patch (OTC) • Nicotine gum (OTC) • Nicotine lozenge (OTC)	These medications should not be taken by people with serious heart palpitations (cardiac arrhythmias) or unstable chest pain (unstable angina) or by those who have had a heart attack (myocardial infarction) within 2 weeks.
Other first-line medications: • Bupropion SR (Wellbutrin SR, Zyban)† • Varenicline (Chantix)‡	Exacerbation of psychiatric symptoms has been noted in some studies. People need to be observed very closely for any worsening of these symptoms. They should stop taking the medication and contact a healthcare provider immediately if they experience agitation, depressed mood, or any changes in behavior that are not typical of nicotine withdrawal or if they have suicidal thoughts or exhibit suicidal behavior. Bupropion SR is contraindicated for people with a history of seizures, heavy alcohol use, head trauma, or anorexia or bulimia. Bupropion can contribute to seizures in people who have a history of heavy drinking. A healthcare provider must carefully screen for these conditions before prescribing the medication.

*NRT provides enough nicotine to eliminate or reduce withdrawal symptoms when clients cease using tobacco.
† Bupropion SR is an antidepressant. The mechanism in tobacco use cessation is not known.
‡Varenicline works by blocking the pleasant effects of smoking from the brain.
Based on Fiore, M. C., Jaén, C. R., Baker, T. B., Bailey, W. C., Benowitz, N. L., Curry, S. J., et al. (2008). *Treating tobacco use and dependence: 2008 update.* Clinical Practice Guideline. Rockville, MD: Public Health Service, U.S. Department of Health and Human Services.

- **Risks**—help the client realize the short- and long-term risks of smoking, as well as environmental risks, such as increased risk of house fires that are due to falling asleep while smoking.
- **Rewards**—help the client identify potential benefits to quitting tobacco use such as improved sense of taste and smell, saving money, feeling better, and having more stamina.
- **Roadblocks**—help the client identify barriers or roadblocks to quitting (such as fear of failure, enjoyment of tobacco, possible weight gain, cravings, or loss of the pleasures of smoking) and provide practical, problem-solving counseling or other interventions to overcome these barriers. For example, clients can be encouraged to find ways to be more active now that they feel better as a way to address potential weight gain.
- **Repetition**—motivational interventions should be repeated with clients. Clients who have been unable to quit previously should be told that most people make repeated attempts to quit before being successful.

Clients Who Relapse to Tobacco Use

Nicotine dependence, like other substance dependence, is a chronic condition that is difficult to treat, and many clients relapse to smoking in the process of quitting permanently.[8] Clients who relapse should be encouraged to immediately make another quit attempt. More intensive treatment can be attempted, such as more counseling and ensuring the medication is being taken appropriately (e.g., correct dose, correct time). A change in medication or using two medications may also be helpful. The counselor should work with the client's healthcare provider regarding medications.

Resources

Tobacco Use Cessation

Substance Abuse and Mental Health Services Administration (SAMHSA)
1-877-SAMHSA-7 (1-877-726-4727) (English and Español)
http://www.store.samhsa.gov/home

Centers for Disease Control and Prevention
Smoking and Tobacco Use Resources
http://www.cdc.gov/tobacco

National Institute on Drug Abuse
http://www.nida.nih.gov
NIDAMED (resources for medical and health professionals)
http://www.drugabuse.gov/nidamed/

Training Resources for Smoking Cessation

Mayo Clinic Tobacco Treatment Specialist Certification
http://mayoresearch.mayo.edu/mayo/research/ndc_education/tts_certification.cfm

NAADAC Tobacco Addiction Specialist Credentialing Program
http://www.naadac.org/index.php?option=com_content&view=article&id=250&Itemid=77

Northeast Addiction Technology Transfer Center
Smoking Cessation Treatment at Substance Abuse Rehabilitation Programs (2006)
http://store.ireta.org (enter "smoking" in the search box)

State University of New York, University of Albany, Rockefeller College, Professional Development Program, Tobacco Recovery Resource Exchange
http://www.tobaccorecovery.org

University of Massachusetts Medical School, Center for Tobacco Treatment Research & Training
http://www.umassmed.edu/tobacco/index.aspx

University of Medicine and Dentistry of New Jersey Tobacco Dependence Program, Professional Education Programs
http://www.tobaccoprogram.org

University of Wisconsin—Center for Tobacco Research and Intervention
http://www.ctri.wisc.edu/HC.Providers/healthcare_mental.health.htm

Notes

[1] Hurt, R., Offord, K., Croghan, I., Gomez-Dahl, L., Kottke, T., Morse, R. M., et al. (1996). Mortality following inpatient addictions treatment. *JAMA, 275,* 1097–1103.

[2] Centers for Disease Control and Prevention. (2009). Cigarette smoking among adults and trends in smoking cessation—United States, 2008. *MMWR, 58*(44), 1227–1232.

[3] Substance Abuse and Mental Health Services Administration. (2011). Tobacco use cessation policies in substance abuse treatment: Administrative issues. *Advisory,* Volume 10, Issue 3.

[4] Centers for Disease Control and Prevention. (2008). Smoking-attributable mortality, years of potential life lost, and productivity losses—United States, 2000–2004. *MMWR, 57*(45), 1226–1228.

[5] Centers for Disease Control and Prevention. (2004). *The health consequences of smoking: A report of the Surgeon General.* Atlanta, GA: National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health.

[6] Centers for Disease Control and Prevention. (1990). *U.S. Surgeon General's report: The health benefits of smoking cessation.* HHS Publication No. (CDC) 90-8416. Atlanta, GA: Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health.

[7] Dani, J. A., Kosten, T. R., & Benowitz, N. L. (2009). The pharmacology of nicotine and tobacco. In R. K. Ries, S. C. Miller, D. A. Fiellin, & R. Saitz (Eds.), *Principles of addiction medicine* (4th ed., pp. 180–193). Chevy Chase, MD: American Society of Addiction Medicine.

[8] Fiore, M. C., Jaén, C. R., Baker, T. B., Bailey, W. C., Benowitz, N. L., Curry, S. J., et al. (2008). *Treating tobacco use and dependence: 2008 update.* Clinical Practice Guideline. Rockville, MD: Public Health Service, U.S. Department of Health and Human Services.

[9] Center for Substance Abuse Treatment. (2006). *Detoxification and substance abuse treatment.* Treatment Improvement Protocol 45. HHS Publication No. (SMA) 06-4131. Rockville, MD: Substance Abuse and Mental Health Services Administration.

[10] King County Public Health Department. (n.d.). *Tobacco prevention program.* Retrieved August 11, 2010, from http://www.kingcounty.gov/healthservices/health/drugs/tobacco/ctcp.aspx

SAMHSA Advisory

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