



TOBACCO CESSATION WORKS: AN OVERVIEW OF BEST PRACTICES AND STATE EXPERIENCES

Despite reductions in smoking prevalence since the first Surgeon General's report on smoking in 1964, approximately 46 million Americans and more than 1.2 billion people worldwide continue to use tobacco.¹ Tobacco use takes a huge toll around the world by causing an enormous amount of health problems and related death and suffering. Tobacco cessation consists of a variety of approaches aimed at reducing the toll of tobacco by helping tobacco users to quit. Helping people to quit smoking is important because of the substantial health benefits to those who are able to quit successfully, such as increased longevity and decreased morbidity and mortality from heart disease, cancer, stroke, and chronic obstructive pulmonary disease.

Unfortunately, the National Commission on Prevention Priorities found that use of tobacco cessation counseling services remains low and estimates that 42,000 lives would be saved each year if utilization of recommended cessation services increased to 90 percent.² In addition to saving lives, research on higher lifetime healthcare costs of smokers versus quitters indicates that the long-term cost savings from these additional quitters could be at least \$9,500 per quitter.³ The research also indicates that the reduction in the number of smokers will result in *immediate* savings of hundreds of dollars per quitter from averted heart attacks, high risk births and other medical emergencies.⁴ Tobacco cessation programs are cost-effective and produce enormous long-term benefits.

Does Cessation Work? The Science Says YES!!

2008 PHS Clinical Practice Guidelines.⁵ In May 2008, the U.S. Public Health Service released its updated clinical treatment guidelines for tobacco cessation, *Treating Tobacco Use and Dependence*. The Guideline is the result of an intensive review of the most recent available scientific literature on tobacco cessation and provides recommendations on the best ways to increase access to, utilization of, and the effectiveness of cessation services and interventions by health care professionals. Below are some of the key findings from the Guideline:

- “It is essential that clinicians and health care delivery systems consistently identify and document tobacco use status and treat every tobacco user seen in a health care setting.
- Tobacco dependence treatments are effective across a broad range of populations. Clinicians should encourage every patient willing to make a quit attempt to use the counseling treatments and medications recommended in this Guideline.
- Brief tobacco dependence treatment is effective. Clinicians should offer every patient who uses tobacco at least the brief treatments shown to be effective in this Guideline.
- Individual, group, and telephone counseling are effective, and their effectiveness increases with treatment intensity. Two components of counseling are especially effective, and clinicians should use these when counseling patients making a quit attempt:
 - Practical counseling (problem solving/skills training)
 - Social support delivered as part of treatment
- Numerous effective medications are available for tobacco dependence, and clinicians should encourage their use by all patients attempting to quit smoking—except when medically contraindicated or with specific populations for which there is insufficient evidence of effectiveness (i.e., pregnant women, smokeless tobacco users, light smokers, and adolescents).
 - Seven first-line medications (5 nicotine and 2 non-nicotine) reliably increase long-term smoking abstinence rates:
 - Nicotine gum
 - Nicotine inhaler
 - Nicotine lozenge
 - Nicotine nasal spray
 - Nicotine patch
 - Varenicline
 - Bupropion SR
 - Clinicians also should consider the use of certain combinations of medications identified as effective in this Guideline.

- Counseling and medication are effective when used by themselves for treating tobacco dependence. The combination of counseling and medication, however, is more effective than either alone. Thus, clinicians should encourage all individuals making a quit attempt to use both counseling and medication.
- Telephone quitline counseling is effective with diverse populations and has broad reach. Therefore, both clinicians and health care delivery systems should ensure patient access to quitlines and promote quitline use.
- If a tobacco user currently is unwilling to make a quit attempt, clinicians should use the motivational treatments shown in this Guideline to be effective in increasing future quit attempts.
- Tobacco dependence treatments are both clinically effective and highly cost-effective relative to interventions for other clinical disorders. Providing coverage for these treatments increases quit rates. Insurers and purchasers should ensure that all insurance plans include the counseling and medication identified as effective in this Guideline as covered benefits.”

CDC’s Best Practices for Comprehensive Tobacco Control Programs.⁶ The U.S. Centers for Disease Control and Prevention (CDC) released updated *Best Practices for Comprehensive Tobacco Control Programs* in October 2007. It details five essential components for comprehensive tobacco control programs using evidence-based analyses of state tobacco control programs.

- “Interventions that increase quitting can decrease premature mortality and tobacco-related health care costs in the short-term.”
- “Tobacco use treatment is more cost-effective than other commonly provided clinical preventive services, including mammography, colon cancer screening, Pap tests, treatment of mild to moderate hypertension, and treatment of high cholesterol.”
- “State action on tobacco use treatment should include the following elements:
 - Sustaining, expanding, and promoting the services available through population-based counseling and treatment programs, such as cessation quitlines
 - Covering treatment for tobacco use under both public and private insurance, including individual, group, and telephone counseling and all FDA-approved medications
 - Eliminating cost and other barriers to treatment for underserved populations, particularly the uninsured and populations disproportionately affected by tobacco use
 - Making the health care system changes recommended by the PHS guideline.”

Interagency Committee on Smoking and Health.⁷ The Interagency Committee on Smoking and Health was established in 1985 to coordinate the Department of Health and Human Services efforts on smoking and health with similar efforts being undertaken by other federal, state, local level, and private agencies. In February 2003, the Committee released *A National Action Plan for Tobacco Cessation* to provide comprehensive cessation assistance to all smokers who want to quit. The plan was based, in part, on evidence that included:

- “Recent comprehensive analyses of hundreds of research reports have revealed that numerous, effective tobacco dependence treatments now exist. Not only do such treatments more than double a smoker’s likelihood of achieving long-term abstinence, but research shows that such treatments are highly cost-effective. In terms of life-years saved per dollar spent, effective counseling and medications for smoking cessation have been found to be among the most cost-effective healthcare practices. In fact, tobacco dependence treatment is more cost effective than the treatment of hypertension, diabetes and hyperlipidemia.”
- “Recent comprehensive analyses have identified a number of evidence-based policy interventions that will dramatically reduce tobacco use by promoting smoking cessation. These include proactive tobacco quitlines, paid mass media campaigns, increasing the unit price of tobacco products, systems-level changes within healthcare delivery systems to enhance the identification of and intervention with tobacco users; and reducing patient out-of-pocket costs for effective treatments.”

Does Cessation Work? States’ Experiences Say YES!

It is important to consider that most states view “cessation” as one component of a broader, comprehensive tobacco control and prevention program. Cessation, in this context, includes both individual services targeting individual tobacco users and population and systems level approaches that

include such things as increasing the excise tax on cigarettes, smoke free workplace ordinances, and provider reminder systems within health care delivery systems. Together, these approaches represent a proven and effective strategy to get tobacco users to quit and maintain abstinence. Below is a sampling of evidence from several states about how their approaches, at both the individual and population level to cessation have been effective at increasing both quit attempts and quit rates.

California: The California Tobacco Control Program was established in 1989 after the passage of Proposition 99. California's program uses a variety of methods to address tobacco cessation, including a mass media campaign to encourage smokers to quit, a telephone Quitline and counseling services, and subsidized nicotine replacement therapy. Additionally, the Tobacco Control Program encourages the implementation of smoking restrictions in worksites and public places, funds several cessation programs at the local level, and encourages physicians and other healthcare professionals to advise their patients to quit smoking and to provide referrals to cessation services. The evidence indicates that these efforts have had a significant impact on tobacco use prevalence.

- During the 1990s, per capita cigarette consumption fell by 57 percent in California compared to only 27 percent in the rest of the United States. By the end of 1999, Californians consumed only 4.1 packs of cigarettes per person per month, compared to 9.1 in the rest of the United States.
- During the 1990s, adult smoking prevalence in California declined by 24 percent, compared to 17 percent in the rest of the United States.
- More Californians are trying to quit (a 25 percent increase since 1990). In fact, quit attempts of a one day or longer increased by 25 percent from 1990 to 1999.
- More Californians work and live in places where they cannot smoke indoors. As a result, smokers have reduced their daily cigarette consumption and many have made quit attempts compared to smokers not constrained by smoking restrictions.
- Use of smoking cessation assistance (including nicotine replacement therapy) has increased by nearly 22 percent between 1992 and 1999.
- Physician advice to quit to their smoking patients increased by more than 20 percent between 1990 and 1999, and the percentage of smokers who stated they quit because of physician advice to quit increased by 32 percent between 1996 and 1999, from 25.3 percent to 33.4 percent.⁸

Massachusetts: The Massachusetts Tobacco Control Program was established in 1993. The program's cessation efforts include outreach and referral for smokers to tobacco treatment services that consist of assessments, individual and group counseling, subsidized nicotine replacement therapy, and follow-up; a toll-free telephone Quitline; a web-based tobacco treatment service that provides information about services available on the Internet, by phone, or in-person; and a statewide media campaign designed to motivate smokers to quit. Program results demonstrate that Massachusetts' program has been effective.

- Among Massachusetts smokers who try to quit, the success rate has increased by 39 percent, from 18 percent in 1993 to 25 percent in 2000.
- The adult smoking rate in Massachusetts fell from 22.6 to 17.9 percent between 1993 and 2000, a reduction of approximately 228,000 adult smokers.
- Between 1990 and 1999, smoking among pregnant women in Massachusetts declined by more than 50 percent (from 25 to 11 percent). Massachusetts had the greatest percentage decrease of any state over the time period (the District of Columbia had a greater percent decline).⁹
- A 2008 study showed that 14 percent of the decline in coronary heart disease deaths in the state between 1993 and 2003 can be attributed to the concurrent decline in smoking.¹⁰

Maine: The Partnership for a Tobacco Free Maine's (PTM) Tobacco Treatment Initiative is part of Maine's comprehensive tobacco prevention and control program, funded by the Tobacco Settlement, to provide vital tobacco-related services currently lacking in clinical settings. Based on scientifically proven methods, the Treatment Initiative provides the public with direct access to counseling and medications that aid cessation, and educates Maine's school and healthcare professionals in treating tobacco use. The following are some highlights from an independent evaluation of the program (based 2002 data):

- The Maine Tobacco HelpLine increased the number of successful quit attempts by 300 percent. Of the approximately 4,000 tobacco users assisted by the HelpLine in 2002, over 1,500 quit temporarily and 730 quit long-term.
- 53 percent of callers reported hearing about the HelpLine through the media.
- The Maine Tobacco HelpLine was used by residents from every county across the state, most notably, reaching groups with high smoking rates – young adults and the uninsured.
- PTM training increased treatment skills in healthcare workers from every county.
- Outcomes with telephonic counseling by the Maine Tobacco HelpLine are similar to that seen in clinics providing face-to-face smoking cessation interventions, with 21.5 percent of smokers not smoking six months after HelpLine counseling.¹¹

Oregon: Oregon's tobacco cessation efforts are part of a larger comprehensive tobacco control program that focuses on the following themes: second-hand smoke is harmful, youth initiation should be prevented, and cessation assistance should be provided. Oregon's approach to cessation is based on the 2000 PHS Clinical Practice Guidelines and combines behavioral assistance with pharmacotherapy. The state's quitline is the way that most smokers enter into cessation services. Oregon is the only state that provides comprehensive Medicaid coverage of all FDA-approved pharmaceuticals (including over-the-counter) and individual, group, and telephone counseling. Evaluation results indicate that Oregon's program has been successful at helping smokers quit. Six months following the initial call to the Oregon quitline, 48 percent of callers have either quit (13 percent) or have made a serious attempt to quit (35 percent). Oregon has been successful due to:

- Health care providers and health plans were active participants in the creation of the state's guidelines and continue to be invested in the program;
- Cessation services are covered by Medicaid;
- There has been an emphasis on strong training and education for providers and health care systems coupled with an effective quitline; and,
- Oregon has placed a heavy emphasis on evaluation that has allowed it to monitor progress and implement program changes and improvements.¹²

Arizona: Arizona's cessation program was implemented in 1996 and consists of proactive telephone counseling, mailed self-help publications, information and referral to local services, pre-recorded voice-mail quit tips, an interactive website with decision-making tools, automated fax on demand quit tips, and cessation technical assistance. An evaluation of these services indicates that Arizona's program has been successful at helping smokers to quit.

- From 1996 to 1999, adult smoking prevalence declined by 21 percent, from 23.1 to 18.3 percent.¹³
- 10 percent of smokers who entered the treatment program were successful quitters (continuously abstinent) at 12 months follow-up.¹⁴

Campaign for Tobacco Free Kids, October 11, 2010 / Ann Boonn

For more information on tobacco cessation, see Campaign factsheets at http://www.tobaccofreekids.org/facts_issues/fact_sheets/policies/cessation/.

¹ U.S. Centers for Disease Control and Prevention (CDC), "Vital Signs: Current Cigarette Smoking Among Adults Aged ≥ 18 Years - United States, 2009," *Morbidity and Mortality Weekly Report (MMWR)* 59, September 7, 2010, http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5935a3.htm?s_cid=mm5935a3_w. Mackay, J, Eriksen, M, & Shafey, O, *The Tobacco Atlas, 2nd Edition*, Atlanta, GA: American Cancer Society (ACS), 2006.

² Maciosek, MV, et al., "Greater Use of Preventive Services in U.S. Health Care Could Save Lives at Little or No Cost," *Health Affairs* 29(9):1656-60, September 2010.

³ Nusselder, W, et al., "Smoking and the Compression of Morbidity," *Epidemiology & Community Health* 54(8):566-74, 2000; Warner, K, et al., "Medical Costs of Smoking in the United States: Estimates, Their Validity, and Their Implications," *Tobacco Control* 8(3):290-300, Autumn 1999.

⁴ Lightwood, JM, et al., "Short-Term Health and Economic Benefits of Smoking Cessation: Low Birth Weight," *Pediatrics* 104(6):1312-1320, December 1999; Lightwood, JM & Glantz, SA, "Short-Term Economic and Health Benefits of Smoking Cessation -- Myocardial Infarction and Stroke," *Circulation* 96(4):1089-1096, August 19, 1997;

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⁵ Fiore, MC, et al., *Treating Tobacco Use and Dependence: 2008 Update—Clinical Practice Guideline*, U.S. Department of Health and Human Services. Public Health Service, May 2008, http://www.surgeongeneral.gov/tobacco/treating_tobacco_use08.pdf.

⁶ CDC, *Best Practices for Comprehensive Tobacco Control Programs*, October 2007, http://www.cdc.gov/tobacco/tobacco_control_programs/stateandcommunity/best_practices/index.htm.

⁷ Subcommittee on Cessation, Interagency Committee on Smoking & Health, *Preventing 3 Million Premature Deaths, Helping 5 Million Smokers Quit: A National Action Plan for Tobacco Cessation*, February 3, 2003.

⁸ Gilpin, EA, et al., *The California Tobacco Control Program: A Decade of Progress, Results from the California Tobacco Surveys, 1990-1998*, La Jolla, CA: University of California San Diego, 2001, http://libraries.ucsd.edu/ssds/pub/CTS/cpc00006/1999_Final_Report.pdf.

⁹ Abt Associates Inc, "Independent Evaluation of the Massachusetts Tobacco Control Program, Seventh Annual Report - January 1994 to June 2000."

¹⁰ Kabir, Z, et al., "Coronary Heart Disease Deaths and Decreased Smoking Prevalence in Massachusetts, 1993-2003," *American Journal of Public Health*, published ahead of print, June 12, 2008.

¹¹ Prepared for the Partnership for a Tobacco-Free Maine by The Center for Outcomes Research and Evaluation at Maine Medical Center, on behalf of the Center for Tobacco Independence, a MaineHealth[®] program, January 2003.

¹² Subcommittee on Cessation, Interagency Committee on Smoking & Health, *Preventing 3 Million Premature Deaths, Helping 5 Million Smokers Quit: A National Action Plan for Tobacco Cessation*, February 3, 2003.

¹³ CDC, "Tobacco Use Among Adults - Arizona, 1996-1999," *MMWR* 50(20):402-40, May 25, 2001, <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5020a2.htm>.

¹⁴ Tobacco Cessation Evaluation Team, University of Arizona College of Public Health, *Arizona Adult Tobacco Cessation Program: Mid-Year Report, July 2000 – January 2002*.