

Introduction

*“Knowing is not enough, we must apply. Willing is not enough, we must do.”**

Tobacco use is the single most preventable cause of death and disease in the United States.¹ An estimated 46 million American adults currently smoke cigarettes and annually cigarette smoking causes approximately 443,000 deaths.² Half of all long-term smokers die prematurely from smoking-related causes.³ For every person who dies from tobacco use, another 20 suffer with at least one serious tobacco-related illness.⁴

Furthermore, exposure to secondhand smoke causes premature death and disease in nonsmokers. In 2009, the Institute of Medicine (IOM) concluded that secondhand smoke exposure causes heart attacks, even brief exposure to secondhand smoke could plausibly trigger a heart attack, and smoke-free laws result in fewer heart attack hospitalizations.⁵ Additionally, the Surgeon General, concluded in 2006 that there is about a 25%-30% increase in the risk of coronary heart disease from exposure to secondhand smoke.^{3, 5} Nonsmokers who are exposed to secondhand smoke at home or work also increase their lung cancer risk by 20%-30%.³

Tobacco use also exacts a huge economic toll. During 2000-2004, cigarette smoking was estimated to be responsible for \$193 billion in annual health-related economic losses in the United States with \$96 billion in direct medical costs and approximately \$97 billion in lost productivity.⁶

Fully funding state tobacco control programs could make a dramatic difference. As Centers for Disease Control and Prevention’s (CDC) *Best Practices for Comprehensive Tobacco Control, 2007 (Best Practices)* demonstrates, this could be accomplished by dedicating just a small portion of what states collect in tobacco tax revenue and tobacco industry settlement payments to tobacco control activities.⁷ By putting into place proven tobacco policies and strategies, we have the ability to dramatically reduce the health and economic burden of tobacco use. The evidence is strong and clear. We know how to end the epidemic of tobacco use and the resulting enormous toll it takes on individuals, families and communities. We need coordinated application of the most effective strategies – combining regulatory, economic, clinical and social approaches – that work together to stimulate public support and change social norms around tobacco use. Increasing the price of tobacco products, implementing smoke-free policies reinforcing smoke-free norms, reducing tobacco advertising and promotion, controlling access to tobacco products, and promoting and assisting tobacco users to quit, are the policy interventions that most effectively drive down tobacco use.

These are not new strategies. The science supporting the effectiveness of these policy interventions has existed for many years and continues to strengthen. CDC published an initial version of *Best Practices* in the late 1990s, and in 2001 the independent Task Force on Community Preventive Services provided recommendations on the most effective interventions for tobacco use prevention and control.^{7, 8} In 2007, IOM released *Ending the Tobacco Problem: A Blueprint for the Nation* with the goal of reducing smoking “so substantially that it is no longer a significant public health problem for our nation.”⁹ The IOM Committee on Reducing Tobacco Use concluded that this ultimate goal could be achieved with a two-pronged strategy: strengthening and fully implementing traditional tobacco control measures, and changing the regulatory landscape to permit policy innovations. Most recently, in 2008 the World Health Organization (WHO) released MPOWER – a framework describing these strategies and how they may be implemented globally.¹⁰

* Johann Wolfgang von Goethe (1749 – 1832).

MPOWER

- M** = **Monitor** tobacco use and prevention policies
- P** = **Protect** people from tobacco smoke
- O** = **Offer** help to quit tobacco use
- W** = **Warn** about the dangers of tobacco
- E** = **Enforce** bans on tobacco advertising, promotion and sponsorship
- R** = **Raise** taxes on tobacco

With its National Tobacco Control Program (NTCP), CDC supports all 50 states and the District of Columbia as well as eight U.S. territories or jurisdictions, six national networks, and seven tribal support centers to achieve the goals of preventing initiation among youth, promoting quitting among adults and youth, eliminating exposure to secondhand smoke, and identifying and eliminating tobacco-related disparities among population groups. The four components of the NTCP are population-based community interventions, counter-marketing, policy and regulation, and surveillance and evaluation. *Best Practices* provides guidance on how to fund and implement these components.

Many states and communities have had in place some or all of these interventions for years and they have the data to show the impact these strategies have had on reducing tobacco use. In California, home of the longest-running comprehensive tobacco control program, adult smoking rates declined from 22.7% in 1988 to 13.3% in 2006.^{11, 12} As a result, compared with the rest of the country, heart disease deaths and lung cancer incidence in California have declined at accelerated rates. But the challenge remains to ensure that all states implement this comprehensive package of high-impact strategies and then – only then – will the potential for ending the tobacco epidemic be realized.

Purpose of this Document

The purpose of *Tobacco Control State Highlights, 2010* is to provide tobacco control programs in the 50 states and the District of Columbia with state-specific data about the high-impact strategies they are currently or could be implementing. The document is also intended to provide policymakers with useful and accessible state-level data to assist with decision-making. In the current challenging economic climate, it is crucial that tobacco control programs focus on high-impact policy interventions.

Similar state highlights documents have been published periodically by CDC, beginning in 1996. Numerous state tobacco control indicators are also available online in CDC's STATE system (www.cdc.gov/tobacco/statesystem). While there are many indicators that can and should be employed in monitoring a program's progress toward reaching goals, those that were selected for this report are considered important and timely indicators because they are closely aligned with high-impact program and policy recommendations from *Best Practices* and MPOWER.

CDC's *Key Outcome Indicators for Evaluating Comprehensive Tobacco Control Programs* describes the rationale for many of the measures included in this publication, and it includes over 100 additional key indicators that have been scientifically linked to program outcomes.¹³ Indicators also relate to the health objectives of *Healthy People 2010*.¹⁴ The availability of recent and reliable data was another important consideration in the selection of indicators. Finally, the 2010 report is organized according to the MPOWER framework to demonstrate the importance of MPOWER and the manner in which *Best Practices* and *Key Outcome Indicators* are aligned with this framework.

MPOWER Framework

MPOWER and *Best Practices* are complementary tools for establishing, implementing and evaluating effective tobacco control programs. While *Best Practices*' recommendations clearly outline the program structure for implementing evidence-based comprehensive tobacco control programs and recommended levels of state investment to reduce tobacco use in each state, more specific guidance on evidence-based and highly effective interventions can be found in the MPOWER package of six policies.

What follows is a brief description and explanation of each of the MPOWER strategies.

Monitor tobacco use and prevention policies

As outlined in *Best Practices*, a comprehensive tobacco control program must have a system of surveillance and evaluation that can monitor and document short-term, intermediate, and long-term intervention outcomes in the population to inform program and policy directions as well as to ensure accountability to those with fiscal oversight. *Best Practices* recommends investing approximately 10% of a program's total annual intervention or programmatic budget in surveillance and evaluation efforts.

Protect people from tobacco smoke

Research clearly shows that there is no safe level of exposure to secondhand smoke.³ Secondhand smoke contains more than 50 carcinogens and causes heart disease and lung cancer in nonsmoking adults.³ Eliminating smoking in indoor spaces is the only way to fully protect nonsmokers from exposure.³ Worksites are a major source of secondhand smoke exposure for nonsmokers, and workers in restaurants and bars are especially likely to be exposed, often at high concentrations.³ Creating smoke-free policies in workplaces and other public places not only protects nonsmokers from involuntary exposure to the toxins in tobacco smoke, but also may have the added benefit of reducing tobacco consumption by smokers and increasing the number of smokers who quit.^{8, 15}

Offer help to quit tobacco use

Cessation of tobacco use can reduce the risk of tobacco-related disease even among those who have used tobacco for decades.¹⁶ Among current U.S. adult smokers, 70% report that they want to quit completely, and millions have attempted to quit smoking.¹⁷ In addition to effective clinical approaches to helping smokers quit, there are several population-based approaches that have proven to be effective including price increases and smoke-free laws. These include telephone counseling (quitlines) and reducing patient out-of-pocket costs for effective cessation treatment.^{8, 18}

Warn about the dangers of tobacco

Comprehensive efforts to educate and warn about the dangers of tobacco use are critical to changing social norms, preventing initiation and promoting cessation. Effective messages that are targeted appropriately can stimulate public support for tobacco control interventions and create a supportive environment for policy and programmatic community efforts.¹⁵ The Task Force on Community Preventive Services' *Guide to Community Preventive Services* strongly recommends sustained media campaigns combined with other interventions as an effective strategy to decrease the likelihood of tobacco initiation and promote smoking cessation.⁸ Experience from many states including Arizona, California, Florida, Massachusetts, Minnesota, and Oregon as well as the national Legacy Foundation campaign suggests that message content is very important. Aggressive counter-marketing campaigns

that confront the tobacco industry's marketing tactics have demonstrated effectiveness.¹⁹ Also, advertising campaigns with strong messages about the health consequences of tobacco use perform better than humorous or emotionally neutral campaigns.

Enforce bans on tobacco advertising, promotion and sponsorship

Billions of dollars are spent annually by tobacco companies to make tobacco use appear to be attractive as well as an accepted and established part of American culture.⁷ Nonsmoking adolescents exposed to tobacco advertising and promotional campaigns are significantly more likely to become young adult smokers.²⁰ The 1998 multi-state Master Settlement Agreement (MSA) included specific tobacco industry restrictions related to youth access, marketing, lobbying, and certain types of outdoor advertising. However, following the settlement, tobacco marketing expenditures more than doubled over the next five years.⁷ Tobacco promotions have shifted away from media such as billboards and magazines and moved toward retail outlets.²¹ Research indicates that point-of-sale advertising encourages youth, particularly younger teens, to try smoking.⁷

With the enactment of the Family Smoking Prevention and Tobacco Control Act (FSPTCA)* on June 22, 2009, the U.S. Food and Drug Administration (FDA) was given authority to regulate marketing and promotion of tobacco products. Through this legislation, states and local communities are also granted the authority to impose restrictions, such as specific bans or restrictions on the time, place, and manner of cigarette advertising. It will be important to measure and monitor the compliance with and impact of these federal, state and local regulations and restrictions to help counter the billions of dollars that are spent annually by the tobacco companies to make tobacco use an accepted and established part of our culture.

Raise taxes on tobacco

Increasing the price of tobacco products reduces tobacco consumption and prevalence, especially among the most price-sensitive populations (e.g. young people).²² Increasing cigarette taxes is an effective method of increasing the real price of cigarettes, but maintaining high prices requires continued tax adjustments to offset the effects of inflation and industry practices designed to control retail product prices.^{22, 23} To illustrate the latter issue, in 2006, cigarette companies spent over \$12 billion on advertising and promotional expenses. Of this, the largest expenditure category by far consisted of promotional allowance price discounts paid to retailers or wholesalers to reduce the price.²⁴

Indicators and Summary of Findings

While there are many indicators used by tobacco control programs to monitor and evaluate programs, those that were selected for this document are closely aligned with policy recommendations from *Best Practices* and have recent and reliable data available. What follows is a description of each indicator and its importance for measuring progress, followed by a brief description of the data sources and definitions. More detailed information on the data sources and definitions are given later in this document.

* Family Smoking Prevention and Tobacco Control Act. Pub. L. No. 111-31 (June 22, 2009). Available at <http://www.gpo.gov/fdsys/pkg/PLAW-111publ31/content-detail.html>

Monitor

Current Smoking among Adults

Smoking prevalence among adults is a fundamental indicator in monitoring the population impact of tobacco use (see Key Outcome Indicator (KOI) 3.14.1).¹³ When assessing smoking prevalence, it is essential to consider the demographic subgroups within the population, as prevalence typically varies by age, race/ethnicity, educational status, and other factors.

The adult smoking prevalence in 2008 ranged from 9.3% in Utah to 26.5% in West Virginia. Across all states, the median prevalence was 18.4%. In general, smoking was more prevalent among those with less education and those who were younger.

Past Month Cigarette Use among Youth

Tobacco use prevention among youth is a critical component of overall efforts to reduce future tobacco-related morbidity and mortality (see KOI 1.14.1).¹³ Smoking during adolescence not only increases the risk of long-term addiction, but causes serious near-term health problems such as reduced lung capacity and reduced physical fitness.²²

In 2006-2007, the percentage of youth ages 12-17 years who reported smoking part or all of a cigarette in the past 30 days ranged from 6.5% in Utah to 15.9% in Kentucky. The national average was 10.1%.

Smoking-Attributable Adult Mortality

Although smoking prevalence has declined dramatically since its peak in the 1960s, the number of smoking-attributable deaths has remained relatively unchanged, because the population has increased and because cohorts of smokers with the highest peak prevalence have now reached the ages with the highest incidence of smoking-attributable diseases.⁶

The national average for smoking-attributable deaths in 2000-2004 among adults ages 35 years and older was 248.5 per 100,000. This means for every 100,000 people ages 35 years or older, an estimated 248.5 people die annually from cigarette smoking in the United States. Average rates among states for 2000-2004 vary greatly, ranging from 138.3 per 100,000 in Utah to 370.6 per 100,000 in Kentucky.

Protect

State Smoke-free Policy

Smoke-free laws covering workplaces, restaurants, and bars without exceptions are the only way to fully protect workers and the public from indoor exposure to secondhand smoke. The *Healthy People 2010* objective (Objective 27-13) was for all 50 states and DC to establish laws on smoke-free indoor air that prohibit smoking in public places and worksites.¹⁴ This indicator is also KOI 2.4.1.¹³

Although having a statewide policy should be the goal, comprehensive local laws provide protection for local residents and may build momentum for statewide action. Enacting local laws can increase support and demand for a statewide law by increasing awareness, demonstrating the ease of implementation and changing social norms.¹³ For these reasons, local smoke-free laws should not be preempted by states, as stated in *Healthy People 2010* Objective 27-19.¹⁴

By the end of 2009, statewide laws ranged from complete smoking bans in workplaces, restaurants and bars (22 states), to partial coverage (4 states with 2 of the 3 areas, 6 states with 1 of the 3 areas), to no coverage (19 states with no areas completely covered).

Adults Who Reported Anyone Smoking in Work Area within Past Two Weeks

When knowledge of the harms of secondhand smoke are communicated effectively, acceptance of, and demand for, smoking bans increase. As state and local smoking bans are enacted covering work-sites and public places, people become educated about the need for policies to protect themselves from exposure to secondhand smoke. Though many states and localities have smoke-free laws in place, they are not all comprehensive, and as a result, some workers are left unprotected. Additionally, compliance with existing policies is essential for the policy to have a public health impact. Thus, this exposure indicator (KOI 2.7.1) reflects both compliance with policies and the existence of policies themselves.¹³

Nationally, 7.3% of respondents who work indoors in 2006-2007 reported anyone smoking within the past two weeks at their worksite. Across the states, this ranged from 2.8% in Delaware to 16.9% Nevada.

Offer

Percent of Smokers Calling Quitline

Although quitting smoking can decrease premature mortality – as well as tobacco-related health care costs in the near term – tobacco use is addictive and quitting is difficult. Although many smokers try to quit each year, without assistance most will relapse.⁷ Quitlines have been shown to be effective in helping smokers stop using tobacco. State quitlines fully funded at levels recommended by CDC could serve 8% of the state's smokers (assuming 6% go on to receive counseling, and 85% of those counseled receive two weeks of free nicotine replacement therapy when offered).⁷

Nationally, the percentage of adult smokers that reported calling their state quitline in 2006-2007 was 2.8%, ranging from 10.9% in Maine to 0.4% in Virginia.

Medicaid Coverage for Counseling and Medications

Despite the progress in reducing tobacco use in the general population, Medicaid enrollees continue to have a higher prevalence of smoking, probably in part because of limited access to the medications and counseling that increase the chance for a successful quit attempt.²⁵ The *Clinical Practice Guideline* recommends comprehensive insurance coverage of tobacco dependence treatments without barriers that reduce utilization and subsequent success of these services by all health insurance providers, including Medicaid.¹⁸

A *Healthy People 2010* objective (Objective 27-8) was to increase insurance coverage among all 51 Medicaid programs to include all FDA-approved pharmacotherapies as well as behavioral therapies for tobacco dependence.¹⁴ In 2007, only seven states (Indiana, Massachusetts, Minnesota, New Mexico, Oklahoma, Oregon, and Pennsylvania) had reached this goal, while six states (Alabama, Connecticut, Georgia, Missouri, Nebraska, and Tennessee) had no Medicaid coverage for medications or counseling.

Warn

Households with No-Smoking Rules

The home is the primary source of exposure to secondhand smoke for infants and children and a major source for non-smoking adults.³ As there is no safe level of secondhand smoke exposure, creating and enforcing a smoke-free home policy is one of the most important decisions a family can make to ensure the health of the household members, including pets. Existence of no-smoking rules indicates that household members have been made aware of the dangers of smoke and smoking. This indicator corresponds to KOI 2.4.4.¹³

Nationally, an average of 77.6% of households reported having rules that smoking was not allowed inside the home in 2006-2007, ranging from 90.6% in Utah to 60.9% in Kentucky.

Tobacco Counter-Marketing Media Intensity

Well-designed, hard-hitting counter-marketing of sufficient reach, duration and frequency can increase awareness, promote favorable attitudes toward tobacco control, and influence behavior.^{7, 26} Gross rating points (GRPs) are a measure of the total intensity of a general audience media campaign, and represent total reach (the percentage of households exposed to an ad campaign) multiplied by frequency of exposure to the ads. Targeted campaigns can be assessed by tracking targeted rating points (TRPs), which measure the percent of the targeted population that is exposed to a media campaign. The *Best Practices* media funding recommendations translate into approximately 800 youth TRPs (80% of the audience reached with 10 exposures each) and 1200 general audience GRPs (80% of the audience reached with 15 exposures each) per quarter.

Nationally, 42 states and the District of Columbia had data available for 2008. (Complete data were not available for 8 states that lacked sufficiently large media markets for comparable data collection in 2008.) Among those with available data, state programs had a median of 30 TRPs per quarter for youth campaigns and 138 GRPs per quarter for general audience campaigns. The values ranged from 1,070 TRPs and 4,766 GRPs per quarter in Utah to 0 GRPs per quarter in four states (Alabama, Georgia, Mississippi, and North Dakota) and 0 TRPs per quarter in six states (Alabama, Georgia, Mississippi, North Dakota, Tennessee, and Texas).

Enforce

State Allows Local Advertising and Promotion Laws

States may preempt the ability of local communities to enact certain local laws, including those that restrict tobacco advertising and promotion. In the latter case, preemption may have a negative effect on efforts for tobacco control. A *Healthy People 2010* objective (Objective 27-19) was to eliminate all laws that preempt local action on tobacco control.¹⁴

In 2009, there were several states that preempted local communities from enacting more restrictive advertising and promotion laws than those of the state: 12 preempt retail display laws, 13 preempt promotion laws, and 14 preempt sampling laws. Nine states preempt in all three of these areas.

Retail Environment Tobacco Licensure

Laws that require businesses to obtain a license to sell tobacco products over the counter and/or in vending machines can help reduce illegal sales to youth and can increase compliance with local, state, and federal tobacco laws (see KOI 1.8.2).¹³ Because tobacco sales often represent a significant proportion of a business's revenue, there is a strong incentive to comply with the laws in order to avoid suspension or revocation of the license. License fees are often used to support the cost of compliance checks.

The number of states that require licensure for both over the counter sales and vending machines is 37, while 8 states do not require either type of license.

Raise

Amount of Cigarette Excise Tax

Because of the strength of the inverse relationship between cigarette price and smoking prevalence among young people and adults, raising the price of cigarettes with excise taxes has been one of the most effective tobacco control interventions.^{7, 8} The amount of product excise tax is one of the most fundamental and reliable indicators of the success of a tobacco control program (see KOI 1.12.1 and KOI 3.12.1).¹³

At the close of 2009, the national average for state cigarette taxes was \$1.34. The median sales tax rate was \$1.18 per pack. Across states, the excise tax ranged from \$3.46 in Rhode Island to \$0.07 in South Carolina.

Minimum Price Law

Because increasing the price of tobacco is so effective at reducing prevalence and consumption, it is important that efforts to raise prices are not undermined by tobacco industry efforts to allow tobacco users to buy their products too cheaply. States have increased taxes as the primary method of raising price. Tobacco companies have utilized discounts, coupons, and other price promotions to reduce the impact excise tax increases would otherwise have on consumption and youth initiation.²⁷ State minimum price laws prohibit cigarettes from being sold below a price calculated by a formula contained in the state statute; thus, they are a means to prevent or mitigate tobacco industry efforts to keep effective prices low.

In 2009, 24 states and DC had minimum pricing laws.

State Funding for Tobacco Control

CDC developed guidelines for funding a comprehensive program at levels needed to end the tobacco epidemic. In *Best Practices*, five broad categories of program components are recommended for each state, with per capita amounts for each category. State funding for tobacco control is one of the best indicators of success over time if funds have been invested appropriately. States that have made larger investments in comprehensive tobacco control programs have seen cigarette sales drop more than twice as much as in the United States as a whole, and smoking prevalence among adults and youth has declined faster as spending for tobacco control programs increased.^{28, 29}

This report presents state investment in tobacco control as a percentage of actual state spending in 2007 relative to the expenditure amount recommended in *Best Practices*. In 2007, no states were funded at 100% of CDC - recommended funding. Maine ranked first with 85.5% of recommended funding, and Tennessee ranked last at 1.1%.