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## The Public Health Challenge of Youth Smoking in North Carolina

### Putting What We Know Into Practice

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#### Introduction

Tobacco use is the single most preventable cause of death in North Carolina and the nation.<sup>1-5</sup> It is addictive and deadly, accounting for more than 11,500 deaths in North Carolina per year at a cost of \$1.9 billion, or \$255 per capita, for direct medical expenditures alone. In 1998, about 13% (\$600 million, or \$513.30 per recipient) of all Medicaid expenditures were spent on smoking-related illnesses and diseases.<sup>6</sup>

Most people begin using tobacco in early adolescence; almost all use begins before age 18, with the average age of initiation between 12 and 14. Of those who smoke and do not quit, more than half will die prematurely from cigarette-related diseases, losing an average 14 years of life.<sup>4,7</sup> Tobacco use rates for both youths and adults are higher in North Carolina than the national average. The Youth Tobacco Survey (1999) shows that 38.3% of North Carolina students in grades 9-12 currently use tobacco products (cigarettes, smokeless tobacco, pipes, bidis, cigars, or kreteks) compared to 34.5% nationally, and 31.6% smoke cigarettes compared to 28% nationally. In grades 6-8, 18.4% of North Carolina students use tobacco products compared to 15.1% nationally, and 15% smoke cigarettes compared to 11% nationally.<sup>8</sup> Among adults, 26% of North Carolinians smoke cigarettes compared to 23% nationally.<sup>9</sup> Tobacco use and the diseases caused by tobacco use do not affect all populations equally.

Tobacco use is highest among lower-income and lower-education populations;<sup>10</sup> this often translates to higher prevalence, morbidity, and tobacco-attributable mortality among ethnic minorities (e.g. African American, Hispanic/Latino and American Indian) and in certain geographic regions.

*North Carolina stands at a crossroad.* Centuries-old social, economic, and political traditions are giving way to the knowledge gained in recent decades about the health effects of tobacco use. We know more now than ever before about how to prevent tobacco use, how to help tobacco users quit, how to protect people from second-hand smoke, and how to save lives once lost to tobacco use. Published data from a growing number of states (California, Massachusetts, Oregon, Florida, and Arizona) have shown that comprehensive tobacco use prevention and control programs, focusing on changing social norms through policy, media, and program services, produce substantial reductions in tobacco use and improve health outcomes.<sup>2</sup> The Master Settlement Agreement between the states' Attorneys General and the top five tobacco manufacturers provided North Carolina with more than \$142 million in 2001, and it was initially estimated to provide \$4.6 billion over 25 years.<sup>11</sup> These funds were split into three separate funds: (1) 50% went to the Golden Leaf Foundation for community economic development in tobacco-dependent communities; (2) 25% went to the Tobacco Trust to help tobacco farmers, quota holders, ware-

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house workers and others in the state; and (3) 25% went to the Health and Wellness Trust Fund Commission.<sup>12</sup> On May 1, 2002, in the first significant allocation of state funds towards preventing and reducing the health consequences of tobacco use, the North Carolina Health and Wellness Trust Fund Commission voted to fund a three-year, \$18.6 million teen tobacco use prevention and cessation program, based on the availability of funds.<sup>13</sup> This is the first step towards a comprehensive, evidence-based program to prevent tobacco use among youth and to reduce the health consequences of tobacco use in North Carolina.

This article will describe what research has shown to be effective in tobacco use prevention and control, and how North Carolina measures up in terms of policies, programs and funding infrastructure. The article draws heavily from two documents: (1) *The Guide to Community Preventive Services (2001)*<sup>14</sup> and (2) The Centers for Disease Control and Prevention's (CDC) *Best Practices for Comprehensive Tobacco Control Programs (1999)*.<sup>15</sup>

## Evidence-Based Interventions: What Works?

The experiences and evidence from state-based tobacco prevention programs implemented in the last two decades demonstrate that fully funded comprehensive programs that combine or coordinate a variety of effective interventions are the most successful in reducing tobacco use.<sup>16</sup> The rationale for a comprehensive tobacco prevention program rests on the importance of achieving four goals:<sup>15</sup>

- ◆ Increasing the number of tobacco users who quit;
- ◆ Reducing the number of children and adolescents who start;
- ◆ Reducing exposure to environmental tobacco smoke (ETS);
- ◆ Identifying and eliminating disparities in both tobacco use and the health consequences of its use among different population groups.

Although progress in one goal contributes to progress in others (for example, increasing the number of persons who quit smoking reduces some exposure to environmental tobacco smoke), success depends on delivering effective interventions to the right populations (for example, strategies effective for adult smokers may not be effective for adolescents at risk for initiation). Comprehensive programs provide multiple opportunities—through communities, healthcare systems, public and private workplaces and settings (such as schools)—to deliver a variety of consistent anti-tobacco messages to different populations. In addition, exposure to anti-tobacco messages from a variety of sources (e.g., media messages, physician advice to quit, workplace smoke-free policies) contributes to individual changes in behavior (such as quitting).<sup>17</sup>

California provides the best-understood example of the effectiveness of a comprehensive approach to tobacco prevention.<sup>18,19</sup> Initiated and supported by a voter-approved referendum in 1989, the California program combined an initial state excise tax increase with an extended mass media campaign, successively stronger clean indoor air policies, school-based education, a state-wide telephone quit line, and the development and support of local coalitions to conduct a wide variety of community activities.

Between 1988 and 1997 tobacco consumption in California was cut in half (from 126 packs per capita per year to 61.3 packs per capita per year), and the prevalence of tobacco use decreased from 22.8% to 18%. The rates of decline in California were significantly greater than in the rest of the nation.<sup>18</sup> Over this same period, California observed a 14% decrease in the rates of lung cancer (compared to a 2.7% decrease in the comparison states).<sup>20</sup> In addition to the rates of decline in lung cancer, a significantly greater annual rate of decline in mortality from heart disease (by 2.93 deaths per year per 100,000 population) was observed in the first three years of California's comprehensive program.<sup>21</sup> These declines provide powerful evidence of the health benefits to the population attributable to a long-duration, statewide, comprehensive tobacco control program.

## The Guide to Community Preventive Services—Tobacco Use Prevention and Control

The CDC Task Force on Community Preventive Services was convened by Dr. David Satcher, Assistant Secretary for Health and Surgeon General of the United States in 2000. *The Guide to Community Preventive Services: Tobacco Use Prevention and Control* was published as a supplement to the American Journal of Preventive Medicine in 2001<sup>14</sup> and online at [www.thecommunityguide.org](http://www.thecommunityguide.org). The Task Force on Community Preventive Services has initiated an ongoing series of reviews of population-based interventions to reduce morbidity and mortality in a variety of public health arenas, including tobacco use prevention and control. *The Guide to Community Preventive Services: Tobacco Use Prevention and Control* provides state and local decision-makers with information and evidence-based recommendations on 14 interventions appropriate for communities and healthcare systems.

The overall recommendations of the task force to reduce tobacco use and exposure to ETS are shown in the accompanying Table. Each recommendation is based on the strength of the evidence of effectiveness found during systematic reviews as of February 2001. A determination that evidence is insufficient should not be confused with evidence of ineffectiveness, as there may be insufficient data to make a determination of effectiveness. In the pages that follow, we

**The Guide to Community Preventive Services: Tobacco Use Prevention and Control; Recommendations to date. (CDC November 2000 Morbidity and Mortality Weekly Report (MMWR) {49; RR-12 February 2001 American Journal of Preventive Medicine (AJPM) {20 (1S) 1-88})**

**Intervention**

**Recommendation**

Strategies to Reduce Tobacco Use Initiation by Children, Adolescents, and Young Adults	
Increasing the unit price for tobacco products	Strongly recommended
Mass media campaigns when combined with other interventions	Strongly recommended
Strategies to Reduce Exposure to Environmental Tobacco Smoke (ETS)	
Smoking bans and restrictions	Strongly recommended
Community education to reduce ETS exposure in the home environment	Insufficient evidence
Strategies to Increase Tobacco Cessation	
Increasing the unit price for tobacco products	Strongly recommended
Mass media education campaigns when combined with other interventions	Strongly recommended
Smoking cessation series	Insufficient evidence
Smoking cessation contests	Insufficient evidence
Interventions Appropriate for Healthcare Systems	
Provider reminder systems (alone)	Recommended (advice)
Provider education programs (alone)	Insufficient evidence
Provider reminder + provider education (with or without patient education)	Strongly recommended
Provider feedback system	Insufficient evidence
Reducing patient out-of-pocket costs for effective treatments for tobacco use and dependence	Recommended
Patient telephone support (quit lines) when combined with other interventions	Strongly recommended

review the recommendations, in light of North Carolina's efforts to implement the recommendations.

**Strategies to Reduce Tobacco Use Initiation**

The CDC Task Force on Community Preventive Services strongly recommended two primary strategies to date to reduce tobacco use initiation:

(1) *Increasing the Unit Price for Tobacco Products:* Interventions to increase the unit price for tobacco products include legislation at the state or national level to raise the product excise tax. Although other factors affect tobacco product pricing, increases in the excise tax have historically resulted in an equivalent or larger increase in tobacco product price and an associated reduction in consumption.

(2) *Mass Media Campaigns:* Campaigns are mass media interventions of an extended duration that use brief,

recurring messages to inform and motivate individuals to remain tobacco-free. Message content is developed through formative research, and message dissemination includes the use of paid broadcast time and print space, donated time and space (as public service announcements), or a combination of paid and donated time and print space. Mass media campaigns can be combined with other interventions, such as increases in the excise tax on tobacco products, school-based education, or other community programs.

*Price:* At five cents per pack, North Carolina's cigarette tax is the third lowest in the nation, following Kentucky (3 cents) and Virginia (2.5 cents). New York recently raised its cigarette tax for the second time in as many years to \$1.50 a pack. The national average tax as of June 13, 2002 is 52.7 cents; this is changing as many states have active tobacco tax initiatives at this time. Numerous studies have led public health experts and economists to conclude that raising tobacco taxes is an effective public policy intervention compo-

nent in any comprehensive effort to prevent and reduce smoking, particularly among youth. Reports of the US Surgeon General, the National Cancer Institute, Institute of Medicine, the World Bank, Wall Street analysts, and even tobacco manufacturers themselves point to tobacco tax increases as *the single most effective method to reduce consumption of tobacco products by children and adolescents*.

A significant increase in the North Carolina tobacco tax would produce public health benefits as well as generate much-needed revenue. For example, the Campaign for Tobacco-free Kids estimates that a 50-cent increase in the tax in North Carolina would prevent more than 70,000 children from becoming smokers, thereby sparing nearly 22,500 kids alive today a smoking-caused, premature death. These reductions, combined with the reduction in smoking among adults, would produce both short-term and long-term savings in healthcare costs. Long-term healthcare savings in North Carolina would exceed a billion dollars. Within just five years, savings resulting from fewer pregnancies compromised by maternal smoking and from fewer smoking-caused heart attacks and strokes would reduce healthcare costs in North Carolina a combined \$27 million.<sup>22</sup>

Public health benefits and healthcare cost savings have compelled many public health authorities to endorse tobacco tax increases. In addition, state legislatures are increasingly supportive of tobacco excise tax increases as a reliable source of revenue, even considering resulting declines in tobacco sales and consumption. More than 25 states have considered a tobacco excise tax increase this year alone. A 50-cent increase in North Carolina's cigarette tax would generate nearly \$400 million in new state cigarette tax revenue and an additional \$9 million in sales tax revenue.<sup>22</sup>

Further, there is public support in North Carolina for an increase in tobacco tax. A 2001 survey, conducted by the NC State Center for Health Statistics, shows that 69.6% of North Carolinians favor a tax of 25 cents to more than \$1.00, if funds were used to prevent teen tobacco use.<sup>23</sup>

**Mass Media Campaigns:** Recent experiences in other states demonstrate that strong tobacco use prevention messages directed at youth and sustained through public education initiatives increase youths' awareness of the dangers of tobacco use, prevent them from starting, and encourage underage tobacco users to quit. Florida campaigns were highly visible, making the youth brand called "**truth<sup>sm</sup>**" ubiquitous. In the three years since the Florida program started in March of 1998, current smoking has declined by 47 percent (from 18.5% to 9.8%) among middle school students and by 30 percent (from 27.4% to 19.0%) among high school students, resulting in almost 75,000 fewer youth smokers.<sup>24</sup>

Much has been learned from existing tobacco prevention and control media campaigns from several states, most notably Massachusetts, California, Arizona, Florida, Oregon, and, most recently, Mississippi. In these states, anti-tobacco media campaigns have been an integral part of

comprehensive tobacco prevention measures that have produced successful outcomes in reducing tobacco use rates, enhancing support for tobacco-free policy initiatives, and affecting attitudes among youth towards tobacco use. Following the lessons of these and a growing number of other states, many anti-tobacco media messages already developed and used have been made available to states willing to incorporate them into their media campaigns. In addition, a national media campaign has been developed and implemented over the past two years by the American Legacy Foundation, exposing youth all across the country (including North Carolina youth) to hard-hitting messages with distinct themes, styles, and content.

North Carolina is ready for an anti-smoking media campaign. First, the local news and editorial media have already signaled a change for how tobacco issues are viewed in our state. The National Cancer Institute collected and analyzed daily news clippings from North Carolina from 1993-1997. Pro-health newspaper articles, editorials, and letters to the editor in daily papers have increased from 20% to 70% of tobacco coverage. Pro-tobacco news coverage decreased from 22% of tobacco coverage to 5%.<sup>25</sup> (Some of this information is from NCI unpublished data.) Second, North Carolina has data on what media are effective with North Carolina teens. The State Tobacco Prevention and Control Branch asked the Tobacco Prevention Program of the UNC Center for Health Promotion and Disease Prevention (CHP/DP) to conduct qualitative assessments of tobacco prevention messages. The first series of focus groups was conducted in the fall of 2000, using ads from the tobacco prevention programs of Massachusetts, California, Arizona, and Florida, and the Philip Morris "Think. Don't Smoke" prevention ads that were initiated at that time. The second series was completed in February of 2002. Both series recruited as participants youth from ethnically diverse backgrounds and rural and urban locations, who were screened for being "at risk" and self-reporting "experimental use." Fourteen focus groups were conducted with nearly 120 youth. The findings from both assessments were consistent: The most effective ads featured content that addressed the serious health consequences of tobacco use, the impact of second-hand smoke, nicotine addiction, and appeals to specific populations that expose industry marketing tactics. The most effective messages combined this content with styles that incorporate graphic images, deep emotional appeal, facts, and family stories. Messages that primarily attacked the tobacco industry did not test as well among NC teens. Thus, we have the data to select and develop messages for use in North Carolina for appropriate populations.

Research suggests that media campaigns are most effective when they are combined with other community- and school-based interventions aimed at preventing initiation among youth. North Carolina has an increasingly active community network of adult-supported youth leaders work-

ing on tobacco prevention efforts in communities. These teen organizations have already been successful in promoting 100% Tobacco-Free Schools (see Sidebar on this page).

While we have evidence of media messages that will appeal to North Carolina youth, and have local networks of teens involved in smoking prevention efforts, the state lacks adequate funding for a successful mass media campaign. North Carolina has not had funding to plan and conduct a comprehensive public education campaign to prevent tobacco use among teens. The allocation of Health and Wellness Trust Funds is the first such state funding. This \$6.2 million appropriation is a start, but it falls short of the \$7.4 million minimum recommended by CDC's *Best Practices*.

## Strategies to Reduce Exposure to ETS

The CDC Task Force on Community Preventive Services strongly recommended smoking bans and restrictions as a means of reducing exposure to ETS. Smoking bans and restrictions are private, nongovernment, and government policies, regulations, and laws that limit smoking in workplaces and public areas. Smoking bans entirely prohibit smoking in geographically defined areas; smoking restrictions limit smoking to designated areas. Smoking bans and restrictions can be implemented with additional interventions, such as education and tobacco use treatment programs.

ETS is estimated to cause 3,000 lung cancer deaths per year among US nonsmokers and 30,000 to 50,000 deaths from heart disease each year.<sup>26</sup> However, North Carolina's opportunities to implement smoking bans and restrictions are limited by a law enacted by the General Assembly in 1993.<sup>12</sup> The law, called "Smoking in Public Places," has the stated intent "...to address the needs and concerns of both smokers and nonsmokers in public places by providing for designated smoking and nonsmoking areas." Yet the law does not mandate smoke-free areas in state government worksites, private worksites or restaurants, and it permits only libraries, museums and healthcare instructional buildings to be designated as nonsmoking. State-controlled buildings, such as auditoriums, may establish nonsmoking areas if at least 20% of the interior space is designated as smoking, including a designated smoking area in lobbies, unless it is "physically impracticable." Despite the relative lack of mandates to establish smoke-free environments, most state-controlled buildings have adopted voluntary nonsmoking policies to protect employees from a known, human lung carcinogen.

The Smoking in Public Places law also prohibited local governments from determining their own public health local laws, rules, or ordinances for clean indoor air after October 15, 1993. State laws of this kind are called *preemptive* because they restrict local counties from passing their own clean indoor air laws that are stricter than the statewide laws.

## Teens Promote 100% Tobacco-Free Schools

In January 2000, Governor James B. Hunt, Jr. called for a Summit to Prevent Teen Tobacco Use. More than 800 students, teachers, school and public health officials gathered in Charlotte at the state's largest public health event.

During the 2000 Summit these teens organized themselves and developed a petition calling on state and local leaders to support a 100% tobacco-free school policy. A "100% tobacco-free school" is one that bans smoking and tobacco use 24 hours a day, campus wide, for students, staff and visitors.

In February 2000, Governor Jim Hunt met with the students who delivered the petition with more than 1,800 signatures asking for 100% Tobacco-free Schools. He recognized the importance of adult role models in shaping teen behavior. In response to the teens' efforts, the Governor sent a letter to every middle and high school principal, superintendent, school board chair and PTA calling for 100% tobacco-free schools for students, staff, and visitors on school grounds and at school-related events.

The results of this effort of youth voices and the Governor's leadership have produced dramatic short-term results, with eight school districts adopting a 100% tobacco-free school policy in the last two years. Yet there is still a long way to go before all 117 school districts in North Carolina are 100% tobacco-free.

According to the American Medical Association, "preemption is the tobacco industry's top legislative goal, because it concentrates authority at the state (or federal) level where the industry is stronger and can more readily protect its interest. Over the past 20 years, the industry has passed some form of preemption in 32 states, gutting dozens of local tobacco control laws and preventing hundreds more from passing."<sup>27</sup>

North Carolina's preemptive legislation was initially introduced to protect the "rights" of smokers and to reduce confusion for North Carolinians who are subjected to smoking regulations in one county and allowed to smoke freely in another. When the legislation was enacted by the NC General Assembly in July 1993, local public health advocates had only three months to pass clean indoor air laws, rules, or ordinances before all opportunity to do so was preempted by

the weak state law. Public health advocates responded to passage of the legislation by working with city councils, county commissioners, and county boards of health to pass 89 new local smoking rules across the state. Most of these rules were passed by county boards of health and included an exemption for small restaurants and bars, because of the fear that prohibiting smoking would put an unfair economic burden on those businesses. Beginning in November 1993, lawsuits contesting new smoking rules were filed against the local boards of health in four counties. While these lawsuits had various results around the state, ultimately the case against the Halifax County Board of Health resulted in the loss of most of the state's ordinances enacted by county or municipal boards of health. Most of these rules have been suspended, and one has been repealed.

While efforts to enact local mandatory smoking bans or restrictions have been preempted, tobacco prevention and control advocates have mounted campaigns to educate citizens about the health effects of ETS and to advocate for the adoption of voluntary private policies. Despite the preemption legislation passed in 1993, North Carolina's percentage of workers protected by smoking policies in the workplace rose from 30.9% in 1993 to 60.9% in 1998-99. This compares with a 1998-99 national average of 69% of workers protected by smoking policies in the workplace. Because smoking control rules by city or county government are unlawful in this state, these are primarily private policies, made at the worksite, often by management at the request of employees. Compliance with worksite nonsmoking policies in North Carolina is slightly higher than the national average, with 96.1% of workers reporting compliance with smoke-free worksite policies nationally compared to 97.4% in North Carolina. Although voluntary smoking policies are protecting three fifths of North Carolina employees, only about half (52.1%) of North Carolina adults reported that they do not permit smoking in the home. This compares to 61.1% nationally. Almost half of middle school students (48.8%) and high school students (46%) in North Carolina live with someone who smokes in the home.<sup>28</sup>

## Strategies to Increase Tobacco Use Cessation

The Task Force on Community Preventive Services recommended several interventions to promote cessation of tobacco use; some were targeted at individual tobacco users, others at healthcare providers. In addition to the two primary strategies, described above, to reduce tobacco use initiation—increasing the price of tobacco products and launching mass media campaigns—their recommendations included the following:

(1) *Provider Reminders Plus Provider Education.* Multi-component strategies to increase tobacco use cessation in-

clude efforts to educate and to prompt providers to identify and intervene with tobacco-using patients, as well as to provide supplementary educational materials when indicated. The components of this intervention are a provider reminder system and a provider education program with or without patient education materials such as self-help cessation manuals.

(2) *Healthcare Systems Providers: Reducing Patient and Out of Pocket Costs for Effective Cessation Therapies.* This intervention includes efforts to reduce the financial barriers to patient use of effective cessation therapies such as nicotine replacement, other pharmacologic therapy, or behavioral therapies such as cessation groups.

(3) *Multicomponent Interventions That Include Patient Telephone Support.* Telephone support interventions provide tobacco product users with cessation counseling or assistance in initiating abstinence, in maintaining abstinence, or both. Telephone support can be reactive (tobacco user initiates contact) or proactive (provider initiates contact or user initiates contact with provider follow-up). Techniques for delivery of telephone support include the use of trained counselors, healthcare providers, or taped messages in single or multiple sessions. Telephone support sessions usually follow a standardized protocol for providing advice and counseling. The telephone support component is usually combined with other interventions such as patient education materials, individual or group cessation counseling, or nicotine-replacement therapies.

*Tobacco Users Want to Quit.* Most tobacco users want to quit, but only a little more than 2% successfully quit each year.<sup>17</sup> In North Carolina, 51.9% of adult smokers, 58.2% of high school smokers, and 64.7% of middle school smokers made at least one serious attempt to quit in the last year. Smokers often try to quit more than once before they succeed. Pregnant women try to quit during pregnancy, as rates drop from 25.1% three months before pregnancy to 13.7% during the last three months of pregnancy; yet many of these women go back to smoking after pregnancy, as rates rise to 20.8%.<sup>29</sup>

Advancements in treating tobacco use and nicotine addiction have been summarized in an evidence-based guideline published by the U.S. Public Health Service, entitled *Treating Tobacco Use and Dependence, A Clinical Practice Guideline*.<sup>30</sup> Less intensive interventions, such as brief physician advice to quit smoking, could produce cessation rates of five to 10 percent each year, while more intensive interventions that combine behavioral counseling and pharmacological treatment of nicotine addiction can increase quit rates by 20% to 25%.<sup>16</sup> North Carolina currently lacks a consistent infrastructure to put into place effective cessation interventions for tobacco users who want to quit.

Recognizing that insurance coverage of tobacco cessation is key to assuring the availability of healthcare systems and health professionals who offer smoking cessation services, and a critical incentive to encourage smokers to quit,

the NC Prevention Partners lead a collaborative effort to encourage insurers and health plans to voluntarily offer coverage of prevention benefits. This initiative, called NC BASIC Preventive Benefits, has achieved the greatest increase in the nation in health plan coverage for smoking cessation counseling and pharmacologic benefits.\* In 1998, none of North Carolina's health plans offered smoking cessation benefits. Currently 75% of North Carolina's health plans offer a high quality tobacco use cessation benefit. Additionally the initiative reaches out to employers to activate them to amend their current benefit structure to include tobacco use cessation as well as nutrition and physical activity insurance products.\*\*

NC Prevention Partners has also expanded efforts to increase quality tobacco use cessation services in healthcare settings in the state. *Quit Now NC!* is a collaborative effort between a variety of stakeholder organizations (public health, healthcare, business, HMOs and insurers) and healthcare leaders in North Carolina to develop resources to support healthcare providers and consumers.\*\*\* *Best Practices* is available in full on the CDC website at [www.cdc.gov/tobacco/](http://www.cdc.gov/tobacco/). This collaborative effort has developed a vision of what NC needs to develop in order to be effective in helping all North Carolina tobacco users to successfully quit. A priority of *Quit Now NC!* has been to develop a statewide, bilingual, toll-free Quit Line with flexible service hours extending into the evening. The Quit Line can register tobacco users who call, then proactively call to support tobacco users and track the outcomes of their cessation efforts. This reflects the strong evidence from the CDC's *Guide to Community Preventive Services* that a statewide Quit Line is effective in treating tobacco users, particularly when coupled with strong advice and pharmacotherapy through personal physicians. A Quit Line, in order to be successful, will also need to be promoted through the media. Some states with Quit Lines report that for every dollar spent on the Quit Line itself, another dollar should be spent on promoting this service. As of May 1, 2002, North Carolina's Health and Wellness Trust Commission approved a plan that would support a Quit Line in North Carolina.

*Quit Now NC!* has developed resources for local providers, including a web-based referral directory listing local smoking cessation treatment and support programs, a one-stop website for health professionals and consumers to find evidence-based guidelines and existing clinical tools, and a tool to assist North Carolina physicians to initiate the conversation with their patients about stopping tobacco use. This tool assists healthcare professionals to identify tobacco users, provide brief motivational counseling, and to refer clients to existing community supports. These tools will be made available to NC healthcare professionals through a campaign in early 2003.

North Carolina has begun to implement programs to help with the needs of special populations who want to quit;

to date these have focused on pregnant women and teens. The Women and Children's Health Section, in partnership with the Healthy Start Foundation and the Tobacco Prevention and Control Branch of the NC Department of Health and Human Services, has developed a nationally recognized program for counseling women who smoke. *N-O-T*, or Not On Tobacco, is a state-of-the-art smoking cessation program designed for teenagers who want to quit smoking. This program was developed by the American Lung Association in collaboration with researchers at West Virginia University. *N-O-T* is a nonpunitive cessation program most often offered in schools. *N-O-T* training has been in demand in North Carolina, and thus far 360 school personnel have been trained in *N-O-T* in all but eight of North Carolina counties; the Health and Wellness Trust Funds will help pay for implementation of *N-O-T*.

### **What Resources and Infrastructure Are Needed for a Comprehensive Program in North Carolina?**

The Centers for Disease Control and Prevention (CDC) prepared *Best Practices of Comprehensive Tobacco Control Programs* in August 1999 to help states assess options for comprehensive tobacco control programs, and to evaluate their state and local funding priorities.<sup>16</sup> This document provides evidence to support each of nine specific program elements including (1) community programs to reduce tobacco use; (2) chronic disease programs to reduce the burden of tobacco-related diseases; (3) school programs; (4) enforcement; (5) statewide programs; (6) counter-marketing; (7) cessation programs; (8) surveillance and evaluation; and (9) administration and management. Each element has a justification based on either published evidence-based guidelines or the evidence of efficacy of the large-scale and sustained efforts of two states (California and Massachusetts). Based on this evidence, specific funding ranges and programmatic recommendations are provided for each state. CDC recommends that it would cost North Carolina between \$42.5 million and \$119 million to develop and implement a comprehensive tobacco control program.

Until this year, North Carolina has relied solely on federal and private funds to address tobacco use prevention and control problems in the state. North Carolina currently has a budget of \$3.7 million for tobacco prevention and control, which includes \$1.9 million in recurring federal funds from the Centers for Disease Control and Prevention and the Substance Abuse and Mental Health Services Administration (SAMHSA) and \$1.7 million in short-term private grants.

When the state legislature established the Health and Wellness Trust Fund with proceeds of the Tobacco Settlement Agreement, it stated that one of the purposes of the

Health and Wellness Trust Fund was: “to develop a comprehensive, community-based plan with goals and objectives to improve the health and wellness of the people of North Carolina with a priority on preventing, reducing, and remedying the health effects of tobacco use with an emphasis on reducing youth tobacco use.”<sup>13</sup> A statewide coalition was formed to develop a comprehensive tobacco prevention and control plan for North Carolina based on CDC’s *Best Practices*. The resulting plan, called *Vision 2010: A Comprehensive Plan to Reduce the Health Consequences of Tobacco Use*, became the blueprint for the Health and Wellness Trust Funds recent allocation of \$18.6 million (\$6.2 million annually for three years).<sup>25</sup> With the addition of the Health and Wellness Trust Funds dedicated to tobacco prevention and control, North Carolina is investing 23% of CDC’s *Best Practices* lowest level of recommended funding (\$42.5 million).

## Conclusion

North Carolina is at a crossroad. With the Health and Wellness Trust Fund Commission’s first-ever investment of state funds to address teen tobacco use prevention and control, North Carolina has taken a first important step towards building an effective, evidence-based program to reduce the leading preventable cause of death and disability in our state. What it takes to build an effective, evidence-based tobacco prevention and control program in North Carolina is not only adequate funding but also a broader base of support to implement effective policy change in order to prevent addiction, reduce the risk of disease, and save lives. Specifically:

(1) Funding for tobacco prevention and control programs should be increased to the lower estimates of CDC’s *Best Practices* guideline for North Carolina in order to fully achieve reductions in tobacco use, tobacco-attributable morbidity, mortality, and economic costs as seen in other states.

(2) A significant increase in price will reduce tobacco use (particularly among youth), save lives, and earn the state needed revenue. There is public support in North Carolina for a price increase if the funds are to be used for a cause the public sees as worthwhile.

(3) Community- and school-based interventions that involve and develop youth as leaders are critical for success. North Carolina needs to use the Health and Wellness Trust Fund Commission resources wisely to build upon existing interventions and expand to geographically and culturally diverse communities that can demonstrate need and capacity to carry out interventions known to be effective. These must be well-funded, collaborative, and staffed at the local level.

(4) Bans on smoking in worksites and other public places are highly effective. North Carolina schools should be 100% tobacco-free, campus-wide, 24 hours a day, seven days a week, for students, staff and visitors. Communities should

be able to decide for themselves how to address smoking in public places. The state’s current preemptive legislation should be repealed.

(5) North Carolina is ready for an evidence-based, focus-group-tested, mass media campaign aimed at changing social norms of tobacco use among youth and parents, teachers and others who influence youth. Messages that tested best with North Carolina teens convey the serious health consequences of tobacco use with personal, human stories. Messages that underscore the power of tobacco advertising test well among teens in NC, but messages that are aimed at attacking the tobacco industry directly do not.

(6) With 38% of high school students now using tobacco products, North Carolina needs to expand the current investments in helping all tobacco users who want to quit. The Health and Wellness Trust Fund Commission has wisely invested in a statewide QuitLine. The QuitLine needs adequate funding to be marketed to diverse populations, using tested messages with adequate reach and repetition to reach those at risk. All private and public providers of healthcare should offer evidence based cessation services as a part of their most basic benefits package.

We know what works; we now have to put these interventions into place. The future health of all North Carolinians hangs in the balance.

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## Notes

\*The BASIC Preventive Benefits Initiative is led by NC Prevention Partners with support from the Cardiovascular Health Program at the Division of Public Health, NC DHHS, and the Centers for Disease Control and Prevention. A Preventive Benefit Watch profiles all preventive behavioral insurance products offered by NC public and private health plans. It is available at: <http://www.ncpreventionpartners.org/basic/75.htm>.

\*\*A 5-Step Guide for NC Employers to Purchase Preventive Benefits is available at: <http://www.ncpreventionpartners.org/basic/eguide.htm>.)

\*\*\**Quit Now NC!* is led by NC Prevention Partners, with support from the Tobacco Prevention and Control Branch at the Division of Public Health, NC DHHS, and the Centers for Disease Control and Prevention.

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