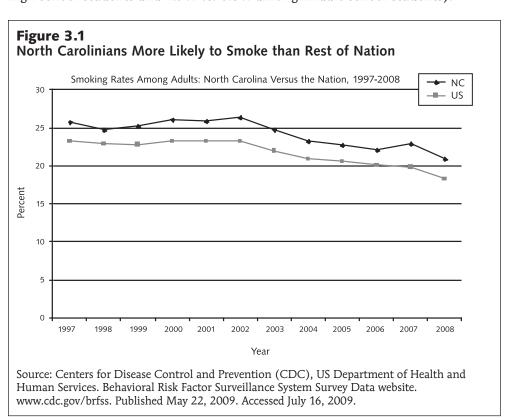
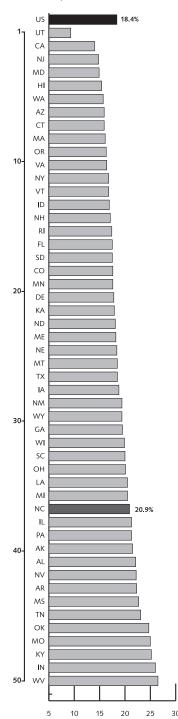
obacco use is the leading cause of preventable death in North Carolina. From 2005-2009, an estimated 13,000 North Carolinians ages 35 years or older died each year from a smoking-related death.<sup>a</sup> In 2008, nearly 2 million, or 20.9%, of adults in North Carolina smoked compared to 18.3% of adults in the United States as a whole, ranking North Carolina 14th highest in smoking prevalence in the nation.<sup>b,1</sup> Although overall smoking rates among adults in North Carolina have dropped since 1997, North Carolina's rates consistently remain above those of the nation. (See Figure 3.1.) In contrast, North Carolina youth are less likely to smoke than youth nationwide (19.0% vs. 19.7% among high school students and 4.5% vs. 6.3% among middle school students).<sup>c</sup>



### Adults Who Are Current Smokers, 2008



Source: Centers for Disease Control and Prevention (CDC), US Department of Health and Human Services. Behavioral Risk Factor Surveillance System Survey Data website. www.cdc.gov/brfss. Published May 22, 2009. Accessed July 16, 2009.

a North Carolina Institute of Medicine calculation extrapolating from State Tobacco Activities Tracking and Evaluation (STATE) System and state population estimates.

b Adult smokers are those who have smoked more than 100 cigarettes in their life and now smoke some days or every day.

c Placona M. Evaluation Specialist, Surveillance and Evaluation Team, Tobacco Prevention and Control Branch, Division of Public Health, North Carolina Department of Health and Human Services. Written (email) communication. May 27, 2009. State Tobacco Activities Tracking and Evaluation (STATE) System. http://apps.nccd.cdc.gov/statesystem/DataSource.aspx. Accessed August 5, 2009.

Many North Carolinians also use other tobacco products (OTP). In 2008, 20% of adults used smokeless tobacco products and 4% used other smoke tobacco products. d.2 Among youth, 26.6% of high school students and 9.1% of middle school students report current use of OTP. e.2

At least 30% of all cancer deaths and nearly 90% of lung cancer deaths—the leading cause of cancer deaths among men and women—are caused by smoking.<sup>3</sup> Furthermore, many other cancers such as oral, esophageal, pancreatic, cervical, bladder, stomach, and kidney are caused by smoking. Other diseases linked directly to smoking include chronic obstructive lung disease and coronary heart disease. Additionally, the risk for health events such as stroke and heart attack are greatly increased in those who smoke.<sup>4</sup> Other tobacco products, such as smokeless tobacco, impose great risks to health as well. Not only do OTP such as chewing tobacco lead to nicotine addiction, they also cause oral cancer. There are 28 cancercausing substances in smokeless tobacco.

Aside from the direct impact on individual smokers, nonsmokers are harmed by exposure to the toxins in secondhand smoke. Secondhand smoke contains 250 or more toxic chemicals, and more than 50 of them are known to cause cancer.<sup>5</sup> There is no safe level of exposure to secondhand smoke and even exposure for a short duration is harmful to health.<sup>5</sup> Similar to the effects of active smoking on individuals, secondhand smoke exposure causes premature death and disease in children and adults who are nonsmokers. Secondhand smoke exposure has been linked to heart disease and lung cancer in nonsmoking adults.<sup>6</sup> It also increases the risk of heart attack, especially among people who have heart disease. Youth are uniquely affected by secondhand smoke. Lung development in children is hindered by secondhand smoke exposure, and exposure can also lead to acute respiratory infections and ear problems and exacerbate asthma, thus causing more severe and frequent attacks.<sup>7</sup>

Nationwide, more than 70% of individuals who smoke want to quit, and each year more than 40% try to quit. 8,9 In 2007 56.8% of smokers in North Carolina stopped smoking for at least one day because they were trying to quit smoking. 10 Unfortunately, individual tobacco cessation rates are low—only about 4%-7% of the 19 million individuals who tried to quit in 2005 were successful. However, success is more likely when individuals receive assistance. Success rates of 10%-30% can occur when individual efforts are combined with other resources and interventions such as a physician's advice to quit, counseling, and appropriate medications. f.g For example, simple advice from a physician can increase quit rates up to 10%, while eight counseling sessions in addition to medication increase quit rates to 32.5%. 8

Tobacco use is the leading cause of preventable death in North Carolina. From 2005-2009, an estimated 13,000 North Carolinians ages 35 years or older died each year from a smoking-related death.

d Adult smokeless tobacco users are those who use smokeless tobacco some days or every day. Adult other tobacco product users are those who report current use of cigars, pipes, bidis, kreteks, or other tobacco products.

e Current use of other tobacco products includes those who report use in the past 30 days of any of the following: cigars, smokeless tobacco, pipes, and bidis.

f Success rates reported here depend on medication and on length, duration, and intensity of counseling.

g Estimated long-term abstinence rates according to meta-analyses of first-line pharmacotherapies, which include bubropion SR, nicotine gum, nicotine inhaler, nicotine nasal spray, and nicotine patch.

North Carolina first began its multifaceted strategy to reduce tobacco use in 1991 with funding from the National Cancer Institute and the American Cancer Society, which was used to develop a tobacco prevention and reduction plan. The state implemented more systemic interventions beginning in 2003 with the infusion of funding from the North Carolina Health and Wellness Trust Fund (HWTF). Prior to this, there was little improvement in tobacco use rates; between 1995 and 2003, the adult smoking rate hovered at about 25%. Since implementing this multifaceted evidence-based strategy—including a social marketing campaign aimed at changing individual behavior (i.e. TRU), clinical counseling and interventions (e.g. QuitlineNC and insurance coverage for counseling and tobacco cessation medications), community efforts (e.g. tobacco-free schools and hospitals), and policy interventions (e.g. a modest increase in the tobacco tax) the adult smoking rate decreased from 24.8% (2003) to 20.9% (2008).11,12 Similarly, the youth smoking rate has declined. From 2003 to 2007 the high school use rate declined from 27.3% to 19.0%, while the middle school use rate dropped from 9.3% to 4.5%.13

Despite our initial achievements, far too many North Carolinians continue to use tobacco products. North Carolina has not done as much as it can to help protect youth from tobacco use initiation, to assist smokers or other adult and youth tobacco users who want to quit, and to protect the public from secondhand smoke. Given the proven negative impacts of tobacco use on health and life and on North Carolina, the Task Force on Prevention has developed recommendations on how to strengthen and improve North Carolina's comprehensive tobacco control program.

#### **Comprehensive Tobacco Control Program**

The Centers for Disease Control and Prevention (CDC) promotes the implementation of sustained, accountable, comprehensive, statewide tobacco control programs as the best way to reduce smoking rates, tobacco-related deaths, and diseases caused by smoking. The CDC defines a comprehensive tobacco control program as a "coordinated effort to establish smoke-free policies and social norms, to promote and assist tobacco users to quit, and to prevent initiation of tobacco use." This approach combines educational, clinical, regulatory, economic, and social evidence-based strategies to reduce smoking and the negative health effects of smoking. In California, the state with the longest running comprehensive tobacco control program, smoking rates declined from 22.7% in 1998 to 13.3% in 2006. As a result, heart disease deaths and the incidence of lung cancer have declined at accelerated rates compared to the rest of the country. In particular, the incidence of lung cancer is decreasing at a rate four times faster in California than in the rest of the country.

There are five components of comprehensive tobacco control programs recommended by the CDC to meet best practice requirements. These include state and community interventions, health communications interventions, cessation interventions, surveillance and intervention, and administration and management.

Since implementing this multifaceted evidence-based strategy...the adult smoking rate decreased from 24.8% (2003) to 20.9% (2008).... From 2003 to 2007 the high school use rate declined from 27.3% to 19.0%. while the middle school use rate dropped from 9.3% to 4.5%.

#### **State and Community Interventions**

The CDC recommends approximately 40% of funding be used on statewide and community interventions.9

The CDC recommends statewide program funds are used to:

- Support and/or facilitate tobacco prevention and control coalition development and to create links to other coalitions with related goals.
- Implement evidence-based policy interventions to protect people from secondhand smoke and increase cessation rates.
- Collect community-specific data and implement culturally appropriate interventions with appropriate multicultural involvement.
- Monitor pro-tobacco use influences to facilitate public discussion and debate among partners, decision makers, and other stakeholders at the community level.

The CDC recommends community program funds be used to:

- Fund community-based organizations to strengthen the capacity of these groups to positively influence social norms regarding tobacco use and to build relationships between health departments and grassroots, voluntary efforts.
- Empower local agencies to build community coalitions that facilitate collaborations among programs.
- Build and sustain capacity through technical assistance and training through collaboration with partners.
- Support local strategies to educate the public and the media and decision makers about secondhand smoke and cessation services.

Funds are also to be used to support planning, prevention of tobacco-related disparities, and collaboration with chronic disease programs.<sup>9</sup>

#### **Health Communications Interventions**

According to CDC best practice recommendations, funding should be sufficient to conduct a health communications campaign in the state's major media markets to promote cessation resources, prevent and eliminate exposure to secondhand smoke, and reach populations with health disparities attributable to tobacco use. Campaigns should educate the public and diverse populations about the health risks of tobacco use and secondhand smoke exposure and should focus on cessation and youth prevention.<sup>9</sup>

North Carolina has a very active health communications practice area, with the HWTF investing in evidence-based paid media campaigns for the first time in the state's history. In particular, the HWTF's campaigns target tobacco prevention and cessation in young people. Forty-six percent of North Carolinians reported they had seen the North Carolina "Tobacco.Reality.Unfiltered" (TRU) media campaign,

There are five components of comprehensive tobacco control programs recommended by the CDC to meet best practice requirements. These include state and community interventions, health communications interventions, cessation interventions, surveillance and intervention, and administration and

management.

which uses emotional testimony of North Carolinians whose health has been severely impacted by tobacco use to help prevent tobacco use among youth. A University of North Carolina at Chapel Hill evaluation of the campaign found that 71% of North Carolinians were aware of the campaign and that more than 95% of North Carolina youth who had seen the 2007 TRU ads reported that the ads were "convincing, attention-grabbing, and gave good reasons not to use tobacco." 13

Media campaigns are also being used to promote cessation through use of the North Carolina Tobacco Use Quitline (QuitlineNC).<sup>1</sup> The "Call It Quits" campaign launched in 2007 by the HWTF is another example of a successful mass media health communications campaign in the state. This campaign led to a seven-fold increase in call volume to the state's quitline, particularly among young adults, parents, and others whose behavior influences teen tobacco use.<sup>13</sup> Moreover, state surveys from 2004-2007 show that media is the most commonly acknowledged method through which smokers in North Carolina learn about cessation services.<sup>1,15</sup> Another successful campaign is the "Become An EX" campaign.<sup>18</sup> Since April 2008, over 4,000 adult smokers in North Carolina have registered as users at www.BecomeAnEX.org to quit tobacco use. Also during this time period, there have been over 26,000 visitors to the website. Once adequate funding is in place for adult callers to use the QuitlineNC, this campaign can be used to urge adult tobacco users to call the quitline for cessation services.

#### **Cessation Interventions**

The CDC recommends telephone counseling and support to assist individuals in quitting to bacco as part of a comprehensive to bacco cessation plan.  $^{\rm m}$  All 50 states and the District of Columbia of fer quitline services as evidence-based practice for smoking cessation.  $^{16}$  [Media] campaigns should educate the public and diverse populations about the health risks of tobacco use and secondhand smoke exposure and should focus on cessation and youth prevention.

h In preventing teen tobacco use, research shows that ads that "elicit strong emotional response, such as personal testimonials and viscerally negative content, produce stronger and more consistent effects on audience recall." (Terry-McElrath Y, Wakefield M, Ruel E, Balch GI, Emery S, Szczypka G, et al. The effect of antismoking advertisement executional characteristics on youth comprehension, appraisal, recall, and engagement. *J Health Commun.* 2005;10:127–143.)

i The quitline, 1-800-Quit-Now, is free and confidential for the caller and is available daily from 8 a.m. to 2 a.m.

j Behavioral Risk Factor Surveillance System (North Carolina). Results from 2004, 2005, 2006, and 2007. Survey asked of respondents who smoked and who had heard of Quit Now NC. Question: If yes, how did you hear of the Quit Now NC smoking cessation services?

k The North Carolina Division of Public Health, with support from Blue Cross and Blue Shield of North Carolina, participated in this national ad campaign designed to help adult tobacco users learn how to get beyond events of the day that typically trigger smoking behavior.

l Malek SH. Tobacco Prevention and Control Branch, Division of Public Health, North Carolina Department of Health and Human Services. Written (email) communication. June 30, 2009.

m This recommendation was developed by the US Task Force on Community Preventive Services, which is a group of experts appointed and supported by the Centers for Disease Control and Prevention. The recommendations of the US Task Force on Community Preventive Services are compiled in the *Guide to Community Preventive Services*, which "serves as a premier source of high quality information on those public health interventions and policies (including law-based interventions) that have been proven to work in promoting health and preventing disease, injury, and impairment." (Community Guide website. http://www.thecommunityguide.org/about/ and http://www.thecommunityguide.org/policymakers.html.)

Funds are needed to support the quitline so it can serve all adult tobacco users who want to quit. From November 2005 to September 2007, more than 5,000 callers reached North Carolina's Tobacco Use Quitline for cessation assistance.<sup>n,o</sup> Success rates for QuitlineNC show an average 17% quit rate, which is comparable with other tobacco use cessation programs. Preliminary data show that 94% of callers were satisfied with their QuitlineNC experience. On average, state quitlines reach an average of 4% of all smokers; however, the current annual funding of North Carolina's quitline only allows the quitline to reach less than 1% of smokers in the state. In addition, state funding for the quitline was reduced by \$500,000 in the 2009-2010 budget. The CDC recommends that state quitlines reach 6% of smokers.<sup>17</sup> Given the experience of other states, a tobacco tax increase in North Carolina should lead to an increase in call volume. Wisconsin's quitline, for example, received 20,000 calls in the first two months following its \$1.00 cigarette tax increase in 2008. Typical annual call volume was just 9,000 before the increase.<sup>18</sup>

The reach of North Carolina's quitline is limited by the resources devoted to the cessation intervention practice area. The HWTF is by far the largest funder of North Carolina Tobacco Use Quitline services, but its funds are limited to pay for calls from teens, young adults, pregnant women, and adults whose tobacco use behavior impacts teens (e.g. parents who are primary caregivers to children under 18 and school and day care personnel).

Funds are needed to support the quitline so it can serve all adult tobacco users who want to quit. Funding is also needed for nicotine replacement therapy (NRT). Evidence shows that counseling assistance combined with evidence-based cessation medications including NRT increases an individual's chance of quitting. Medication combined with quitline counseling leads to higher abstinence rates than medication alone (28.1% versus 23.2%).8 Due to legislation passed in 2008, NRT may be supplied free-of-charge to callers through the quitline. The CDC recommends a minimum two-week course of NRT and up to an eight-week course for uninsured or publicly insured callers.

#### Surveillance and Evaluation

Surveillance and evaluation of programs and other statewide efforts are of utmost importance and should be a priority in the planning process. The CDC recommends about 10% of total annual funding be allocated to surveillance and evaluation of short-term, intermediate, and long-term intervention outcomes to guide programs and policies and to guarantee accountability to those with fiscal oversight. The intent of this funding is to ensure that North Carolina's tobacco control efforts are achieving the intended purposes and to identify appropriate modifications to existing programs and policies.

n OuitlineNC was established in November 2005.

o The NC Tobacco Use Quitline program is administered by the Tobacco Prevention and Control Branch, North Carolina Division of Public Health (DPH), North Carolina Department of Health and Human Services. Funding is provided by the North Carolina Health and Wellness Trust Fund and the Centers for Disease Control and Prevention (through DPH). Start-up promotions funding was provided by Blue Cross and Blue Shield of North Carolina. Free & Clear, Inc. is the current QuitlineNC vendor.

p NCGS §90-18.6

State surveillance includes "monitoring tobacco-related attitudes, behaviors, and health outcomes at regular intervals of time." At its core is monitoring achievement within four CDC main program goals:

- Preventing initiation of tobacco use among youth and young adults.
- Promoting quitting among adults and youth.
- Eliminating exposure to secondhand smoke.
- Identifying and eliminating tobacco-related disparities among population groups.

Building and maintaining effective surveillance systems at the state level is critical to achieve these goals. In addition, participation in national surveillance systems enables states to compare progress against other states.<sup>9</sup>

#### Administration and Management

The CDC recommends approximately 5% of total annual funding be allocated to state administration and management. Funds are used to support collaborative efforts and coordination among state agencies, public health programs, and policy makers. The infrastructure for tobacco cessation and prevention that is made possible through investments in the administration and management practice area is critical to the occurrence of effective state efforts.

#### Funding for a Comprehensive Tobacco Control Program

The CDC recommends that states fund a comprehensive tobacco control program at levels based on the evidence as documented in Best Practices for Comprehensive Tobacco Control Programs (2007). Based on North Carolina's population, smoking prevalence, and other factors, the CDC recommends an annual state appropriation for North Carolina of \$106.8 million for comprehensive tobacco control programs.<sup>q</sup> To meet the CDC best practices requirements for comprehensive tobacco control programs, a state needs funding and activity in all five areas (as outlined above).9 A practical approach would be to incrementally work toward the full amount, which would allow the state time to build the capacity and infrastructure needed to successfully support and sustain initiatives and efforts within the five best practice areas. CDC funding, tobacco tax revenues (see Recommendation 3.2), or general funds could be used to provide such funding. Combining all sources of tobacco prevention and control funding, North Carolina's total funding amount for FY 2008-2009 was \$20.6 million, which the CDC considers "minimal reach," reaching less than 10% of the total population. Total funding for FY 2009-2010 is expected to be below \$17.8 million due to the decrease in funding to the HWTF.

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programs.

q Comprehensive tobacco control programs are coordinated efforts to establish smoke-free policies and social norms in all populations and age groups, to help all tobacco users to quit, and to prevent the initiation of tobacco use in young people.

Research by the CDC has shown that the more states spend on comprehensive tobacco control programs, the greater the reductions in smoking.

Research by the CDC has shown that the more states spend on comprehensive tobacco control programs, the greater the reductions in smoking. Additionally, sustained investments have shown greater and faster impacts. The North Carolina Division of Public Health (DPH) and the HWTF, along with key stakeholders, are planning to convene a committee to develop North Carolina's Vision 2020 Plan for comprehensive evidence-based tobacco prevention and control using the CDC best practice areas. The Vision 2020 Plan planning committee will involve key stakeholders who will determine a funding plan to incrementally and strategically address all five evidence-based tobacco prevention and control intervention areas according to greatest need and demand. Reaching the CDC's current recommended funding level, \$106.8 million, by 2020 will be integral to the completion and successful implementation of the plan. The Vision 2020 Plan, shown in Table 3.1, recommends an incremental approach to reaching the CDC recommended level of funding.

In theory, most or all of the funding recommended by the CDC could come from Tobacco Master Settlement Agreement (MSA) funds. In North Carolina, only 25% of MSA funds were allocated specifically for population health improvement. These funds were allocated to the HWTF. This funding has been primarily focused on reducing tobacco use among teens and young adults up to age 24. For FY 2008-2009, the HWTF's funding for tobacco prevention and cessation initiatives was \$19.2 million. However, the HWTF will have less money available to support tobacco prevention and cessation or other health promotion activities in the future. In 2004, the North Carolina General Assembly scheduled the HWTF to pay \$350 million in bonds that the state issued to support capital construction unrelated to prevention and cessation services. Due to this debt service burden, the HWTF will have significantly less money to put towards tobacco prevention and cessation. HWTF funding for these activities is expected to decrease to below \$15 million starting in FY 2009-2010 as it begins to pay for the debt service at the highest level under the 2004 legislation.

The CDC is the other primary source of current funding for tobacco prevention and control in North Carolina. In FY 2008-2009, the Tobacco Prevention and Control Branch received \$1.4 million from CDC grants. A similar funding level is anticipated in FY 2009-2010. This federal funding provides infrastructure for DPH's evidence-based tobacco control efforts.

r In 2000, the North Carolina General Assembly created the HWTF. With its funding (25% of the Tobacco MSA), the HWTF invests in programs and partnerships to help all North Carolinians achieve better health." The HWTF invests in a wide array of prevention activities, including teen tobacco use and prevention and cessation (\$19.2 million in FY 2008-2009); obesity prevention (\$3.4 million in FY 2008-09); health disparities reduction (\$5 million in 2008-09); and other prevention activities (\$1 million in FY 2008-09).

**Table 3.1**North Carolina Tobacco Prevention and Control Current and Recommended State Funding Levels (2009-2020)

		Minimal Reach (<10% smokers)	Minimal Reach (<10%)	Limited Reach (25%)	Midpoint (50%)	Large Reach (85%)	Full Reach (100%)
	CDC Recommended Funding Level	2008 - 2009 Funding	FY 2010 Expected Funding with HWTF Decrease	25% of GOAL by 2011	50% of GOAL by 2015	85% of GOAL by 2018	100% of GOAL by 2020
State and Community Interventions	\$42.7 M	\$8.8 M <sup>2</sup>	\$7.5 M	\$4.7-10.7 M	\$11.1-21.4 M	\$21.8-42.3 M	\$42.7 M
Health Communication Interventions <sup>3</sup>	\$17.1	\$6.9	\$5 M	At 25% level in FY 2009 and in FY 2010 (based on projections) <sup>4</sup>	\$4.4-8.5	\$8.7-16.9	\$17.1
Cessation Interventions <sup>5</sup>	\$33.1	\$1.9	\$1	\$3.6-8.3	\$8.6-16.6	\$18.2-32.8	\$33.1
Surveillance and Evaluation	\$8.5	\$0.7	\$0.5	\$0.94-2.1	\$2.2-4.3	\$7.4-8.5	\$8.4
Administration and Management	\$5.3	\$1.6	\$1.0	At 25% level in FY 2009 and in FY 2010 (based on projections) <sup>4</sup>	\$1.4-2.7	\$2.7-5.3	\$5.3
TOTAL	GOAL \$106.8 M	\$22.0 M <sup>1</sup>	\$17.8 M	\$26.7 M	\$53.4 M	\$90.8 M	GOAL \$106.8 M

<sup>[1]</sup> This represents 18.6% of CDC's best practices level for FY 2009; however HWTF's funding for tobacco prevention and cessation goes from \$19.2 million in 2008-09 to approximately \$15 million in 2009-2010 due to the debt service burden.

Source: Tobacco Prevention and Control Branch, Division of Public Health, NC DHHS. Developed in response to NC recommendations from the CDC in *Best Practices for Comprehensive Tobacco Control Programs, 2007.* http://www.cdc.gov/tobacco/tobacco\_control\_programs/stateandcommunity/best\_practices/.

<sup>[2]</sup> Note that 86% of this funding is focused on teen tobacco interventions and only 14% is focused on other evidence-based interventions, such as eliminating exposure to secondhand smoke from workplaces, creating systems change to promote cessation, and other evidence-based policy interventions.

<sup>[3]</sup> Considering the reach and average relative cost of media in the state.

<sup>[4]</sup> The HWTF's TRU Campaign and quitline promotions are evidence-based campaigns. They are effective and the state's first successful education campaigns for tobacco prevention and cessation. The CDC recommends that priority funding be given to health communication interventions even when overall tobacco control funding is limited.

<sup>[5]</sup> Considering the state prevalence rate and the total number of smokers.

To ensure that North Carolina has an effective tobacco control program that meets the CDC's recommendations, the Task Force recommends:

## Recommendation 3.1: Fund and Implement a Comprehensive Tobacco Control Program

- a) The North Carolina General Assembly should support the state's Comprehensive Tobacco Control Program by protecting the North Carolina Health and Wellness Trust Fund's (HWTF) ability to continue to prevent and reduce tobacco use in North Carolina by:
  - 1) Ensuring that no additional funds are diverted from HWTF's share of the Master Settlement Agreement (MSA).
  - 2) Releasing HWTF from its obligation to use over 65% of its annual MSA receipts to underwrite debt service for the State Capital Facilities Act, 2004.
- b) The North Carolina General Assembly should better enable the North Carolina Division of Public Health (DPH) and HWTF to prevent and reduce tobacco use in North Carolina by appropriating additional funding to DPH so that this new state funding, combined with HWTF's annual allocation for tobacco prevention (based on provision A), reaches \$106.8 million in recurring funds by SFY 2020. The total amount of the funds available for Tobacco Control in North Carolina should be increased as follows:
  - 1) \$26.7 million in recurring funds by SFY 2011
  - 2) \$53.4 million in recurring funds by SFY 2015
  - 3) \$90.8 million in recurring funds by SFY 2018
  - 4) \$106.8 million in recurring funds by SFY 2020
- c) DPH should work collaboratively with the HWTF and other stakeholders to ensure that the funds are spent in accordance with best practices as recommended by the Centers for Disease Control and Prevention.

#### **State and Community Policy Interventions**

Evidence-based comprehensive state and community tobacco prevention and cessation policies are an important component of a state's comprehensive tobacco control program. Such policies help all tobacco users quit, prevent young people from starting to use tobacco products, and protect everyone from the dangers of secondhand smoke. Three of the five most significant actions the CDC recommends states and communities take are policy changes: levying effective tobacco taxes on all tobacco products, enacting smoke-free laws, and reducing out-of-pocket costs for effective cessation therapies.<sup>19</sup>

#### **Tobacco Taxes**

The CDC recommends increasing taxes on all tobacco products as a primary method to reduce tobacco use and improve public health.<sup>19</sup> In 2005-2006 North Carolina increased its cigarette tax to 35 cents. In 2009-2010 the state increased the cigarette tax an additional 10 cents, bringing the state cigarette tax up to its current rate of 45 cents. With this increase, North Carolina still has the 7th lowest cigarette tax in the country (as of August 12, 2009).<sup>s,t,20,21</sup> Further, the state's tax on OTP, which is currently 12.8% of the wholesale price,<sup>u</sup> is among the lowest in the country.<sup>22</sup>

Raising the tax on all tobacco products will deter initiation of tobacco use by young people, encourage tobacco users of all ages to quit, and save lives. <sup>19,23</sup> The CDC recommends increasing the unit price for tobacco products to reduce the number of people who start smoking and help those who smoke quit. Research shows that a 10% price increase in a pack of cigarettes results in a 4.1% decrease in tobacco use within the general population. Furthermore, youth are reportedly more sensitive to an increase in cigarette price: a 10% price increase results in a 4%-7% decrease in the number of youth who smoke. Although the recent 10-cent increase in the state tobacco tax is too small to have a measurable impact on youth smoking rates, youth smoking rates across the country are expected to decrease due to the 62-cent federal tobacco tax increase in 2009. When added together, the two taxes represent a 19% increase in the cost of a pack of cigarettes, which should result in an 8%-14% decrease in the number of youth who smoke.<sup>24</sup>

Increasing the cigarette tax to the national average would provide tremendous gain for the state in terms of reducing death and disability due to tobacco use. The Campaign for Tobacco-Free Kids estimates that increasing North Carolina's cigarette tax to the national average of \$1.32 (as of August 12, 2009) would result in a 14% decrease in the youth smoking rate. The organization also estimates that there would be 73,700 fewer future youth smokers and 45,500 fewer adult smokers. Additionally, 35,600 future smoking-related deaths would be avoided.

The CDC recommends increasing taxes on all tobacco products as a primary method to reduce tobacco use and improve public health.

s Including the District of Columbia

t Alabama, Georgia, Louisiana, North Dakota, South Carolina, and Virginia have cigarette taxes lower than 45 cents.

u Section 27A.5.(c) of SL 2009-451.

v This recommendation was developed by the US Task Force on Community Preventive Services, which is a group of experts appointed and supported by the Centers for Disease Control and Prevention, US Department of Health and Human Services. The recommendations of the US Task Force on Community Preventive Services are compiled in the *Guide to Community Preventive Services*, which "serves as a premier source of high quality information on those public health interventions and policies (including law-based interventions) that have been proven to work in promoting health and preventing disease, injury, and impairment." (Community Guide Web site. http://www.thecommunityguide.org/policymakers.html.)

w Campaign For Tobacco-Free Kids is a nonprofit 501(c)(3) based in Washington, DC, that is dedicated to being a leader in reducing tobacco use and its consequences. Major funders include the American Cancer Society, the Robert Wood Johnson Foundation, the American Legacy Foundation, the American Heart Association, and GlaxoSmithKline Consumer Healthcare. Numerous professional associations including the American Academy of Family Physicians, American Academy of Pediatrics, American College of Obstetricians and Gynecologists, American Dental Association, and American Medical Association are partner organizations. For more information, visit http://www.tobaccofreekids.org.

Further, estimated health care savings from raising North Carolina's cigarette tax to the national average of \$1.32 are as follows:

- \$19.1 million in 5-year health care savings from fewer smoking-affected births.
- \$25.6 million in 5-year health care savings from fewer smoking-caused heart attacks and strokes.
- \$1.7 billion in overall long-term health care savings.<sup>20</sup>

In addition, the Campaign for Tobacco-Free Kids estimates that the amount of new annual state tax revenue generated from raising North Carolina's cigarette tax to the national average would be \$296.6 million.<sup>x,25</sup> (This is in addition to the revenue raised by the existing 45-cent tax.) The federal tax on cigarettes was increased to 61.66 cents with the February 2009 federal reauthorization of the Children's Health Insurance Program.<sup>y,z</sup> All of these projections consider the impact of the 61.66-cent federal tax increase on state smoking levels, pack sales, and pack prices.<sup>25</sup>

Raising the tax on OTP will discourage the use of these products as well, with a more significant impact on youth initiation. Furthermore, according to a report of the US Surgeon General, adolescents who use smokeless tobacco are more likely to use cigarettes than those who do not. In addition, an OTP tax comparable to the cigarette tax would discourage the use of OTPs as an alternative to cigarettes by individuals who are quitting or reducing their cigarette consumption. Therefore, implementing these tax increases at the same time is ideal.

An OTP tax comparable to a \$1.32 cigarette tax would be 55% of the wholesale price of OTPs. North Carolina's current OTP tax is 12.8% of the wholesale price. Increasing North Carolina's OTP tax to 55% would lead to an overall OTP consumption decline of 14.8% and a youth use decline of 27.4%, according to the Campaign for Tobacco-Free Kids. New annual revenue of \$48.8 million would be created (in addition to the \$296.6 million of new revenue created by increasing the cigarette tax to the national average). Together, these two tobacco taxes would raise \$345.4 million in new revenues. Revenues generated from the increased taxes on cigarettes and OTP should be used to support tobacco cessation and prevention efforts.

Based on research findings and experiences of other states, the Task Force on Prevention determined that raising North Carolina's tobacco taxes is one of the

x Note from Campaign from Tobacco-Free Kids: "These estimates are fiscally conservative because they include a generous adjustment for lost state pack sales (and lower net new revenues) from new smuggling and tax evasion after the rate increase and from fewer sales to smokers or smugglers from other states."

P.L. 111-003

z The new federal tax went into effect April 1, 2009.

aa Taxable tobacco products are defined in this report as smoking tobacco, cigarettes, cigars, cigarillos, bidis, kreteks, snuff, chewing tobacco, snus, and also includes any other product expected or intended for consumption that contains tobacco or nicotine unless it has been approved by the United States Food and Drug Administration as a cessation-assistance product and is being distributed and sold exclusively for that approved cessation-assistance purpose.

most effective ways to reduce initiation of tobacco use by young people and encourage all tobacco users to quit. In addition, North Carolina can show continued commitment to protecting public health and saving lives from tobacco use and secondhand smoke exposure by maintaining a cigarette tax rate that always meets or exceeds the current national average.

Therefore the Task Force recommends:

## Recommendation 3.2: Increase North Carolina Tobacco Taxes (PRIORITY RECOMMENDATION)

- a) The North Carolina General Assembly should increase the tax on a pack of cigarettes to meet the current national average. The cigarette tax should be regularly indexed to the national average whenever there is a difference of at least 10% between the national average cost of a pack of cigarettes (both product and taxes) and the North Carolina average cost of a pack of cigarettes.
- b) The North Carolina General Assembly should increase the tax on all other tobacco products to be comparable to the current national cigarette tax average, which would be 55% of the product wholesale price.
- c) These new revenues should be used for a broad range of prevention activities including preventing and reducing dependence on tobacco, alcohol, and other substances.

#### Comprehensive Smoke-Free Laws

Secondhand smoke causes the death of approximately 38,000 nonsmokers in the United States, which translates into approximately 1,700 North Carolinians every year. The CDC recommends smoking bans and restrictions to decrease exposure to secondhand smoke. In addition, smoking bans are effective in reducing cigarette consumption and in increasing the number of people who quit smoking. The people who quit smoking.

In May 2009, North Carolina passed Session Law 2009-27, which bans smoking in restaurants and most bars effective January 2, 2010. The bill also provides local governments the ability to restrict smoking in public places such as movie theaters and shopping malls with the approval of their Board of County Commissioners. Specifically, the bill says that local governments may "enforce ordinances, board of health rules, and policies restricting or prohibiting smoking that are more restrictive than State law and that apply in local government buildings, on local

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bb This recommendation was developed by the US Task Force on Community Preventive Services, which is a group of experts appointed and supported by the Centers for Disease Control and Prevention, US Department of Health and Human Services. The recommendations of the US Task Force on Community Preventive Services are compiled in the Guide to Community Preventive Services, which "serves as a premier source of high quality information on those public health interventions and policies (including law-based interventions) that have been proven to work in promoting health and preventing disease, injury, and impairment." (Community Guide web site. http://www.thecommunityguide.org/policymakers.html.)

cc Session Law 2009-27 exempts cigar bars and private clubs.

In May 2009, North Carolina passed Session Law 2009-27, which bans smoking in restaurants and most bars effective January 2, 2010. While the new law is a step forward and marks progress in protecting North Carolinians from secondhand smoke, North Carolina still does not have comprehensive smoke-free laws that protect all **North Carolinians** from secondhand smoke exposure by prohibiting smoking in all indoor workplaces and public areas.

government grounds, in local vehicles, or in public places." While the new law is a step forward and marks progress in protecting North Carolinians from secondhand smoke, North Carolina still does not have comprehensive smoke-free laws that protect all North Carolinians from secondhand smoke exposure by prohibiting smoking in *all* indoor workplaces and public areas.

Current smoke-free policies in the state only provide limited protection from secondhand smoke exposure. Partial coverage leads to disparities in secondhand smoke exposure. For example, blue collar workers in North Carolina are less likely to report a smoke-free workplace policy than white-collar workers.<sup>30</sup> Current smoking ban laws and regulations cover an estimated 69% of the workforce, leaving 31% unprotected.<sup>31</sup> To protect the public's health, all workers in North Carolina, no matter where they are employed, should be provided with a completely smoke-free work environment as a minimum level of protection from secondhand smoke exposure. A comprehensive state law would protect workers at all worksites including small worksites, private offices, factories, clubs, and bowling alleys. Current practices for decreasing second-hand smoke exposure, such as ventilation and smoking areas, are ineffective in protecting workers and visitors from second-hand smoke exposure. Ventilation systems are ineffective since they do not remove the harmful constituents of secondhand smoke.<sup>32</sup> Allowing smoking in certain worksites or in certain areas of worksites does not provide equal and adequate protection to all employees and visitors. A recent study revealed that while business owners in North Carolina generally agree that secondhand smoke may cause lung cancer and heart disease, the single greatest motivation among business owners to adopt a 100% smoke-free policy would be legal regulation or requirement.33

Existing state law prohibits smoking in state government buildings and vehicles. Other laws allow, but do not *require*, local governments to prohibit smoking in local government buildings and vehicles, and allow, but do not *require*, the University of North Carolina system and North Carolina Community College System to regulate smoking on campuses. North Carolina state laws and regulations require local boards of education to adopt policies that prohibit tobacco use in public schools (K-12); prohibit smoking in long-term care facilities; prohibit child care facility operators from using tobacco products when children are in care or are being transported; and prohibit the use of tobacco products in state correctional facilities. dd.ee,34 Private businesses may, of course, set up their own smoke-free policies. But under current North Carolina laws, businesses are not required to be smoke-free. Venues that are currently not covered by a smoke-free law at the state level in North Carolina include private workplaces, retail stores, and recreational/cultural facilities.<sup>34</sup>

dd SL 2007-236, SL 2007-193, Sec. 3.1 Effective August 1, 2008; SL 2007-459; NC Child Care Commission Rule 1720; SL 2005-372

ee Malek SH. Tobacco Prevention and Control Branch, Division of Public Health, North Carolina Department of Health and Human Services. Written (email) communication. May 27, 2009.

As of June 2009, 27 states and the District of Columbia have passed smoke-free laws that cover restaurants and bars.<sup>ff</sup> Four other states have smoke-free laws that cover restaurants but exempt stand-alone bars.<sup>gg,35</sup> As of July 1, 2009, 17 states have comprehensive smoke-free laws that cover all worksites including restaurants and bars.<sup>36</sup>

Comprehensive statewide smoke-free laws to eliminate exposure to secondhand smoke in all workplaces would save lives in North Carolina. To protect all North Carolinians from secondhand smoke, the Task Force on Prevention recommends:

## Recommendation 3.3: Expand Smoke-free Policies in North Carolina

- a) The North Carolina General Assembly should amend current smoke-free laws to mandate that all worksites and public places are smoke-free.
- b) In the absence of a comprehensive state smoke-free law, local governments, through their Boards of County Commissioners, should adopt and enforce ordinances, board of health rules, and policies that restrict or prohibit smoking in public places in accordance with GS 130A-497.

#### **Cessation Interventions**

Only about 4%-7% of individuals who try to quit tobacco use are successful. A lack of consistent and effective treatment and the chronic nature of tobacco dependence are among the reasons that quit attempts are unsuccessful. Consistent and effective tobacco intervention in the health care delivery system requires the involvement of providers, health care systems, insurers, and purchasers of health insurance.<sup>8</sup>

Providers can play a critical role in helping people quit tobacco use—the leading cause of preventable death in North Carolina. Evidence shows that physicians advising patients to quit provide individuals with motivation for quitting and can increase successful quit rates to 5%-10%.<sup>37</sup> Moreover, cessation success (or abstinence) is directly related to the length, number, and intensity of counseling sessions. Research shows that as these factors increase so do long-term quit rates.<sup>8</sup> Yet, nearly 30% of smokers in the state reported they had not been advised to quit

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gg States with smoke-free laws covering restaurants, but exempting stand-alone bars, are Florida, Idaho, Louisiana, and Nevada.

ff States with smoke-free laws covering restaurants and bars include Arizona, California, Colorado, Connecticut, Delaware, Hawaii, Illinois, Iowa, Maine, Maryland, Massachusetts, Minnesota, Montana (extends to bars October 1, 2009), Nebraska (June 1, 2009), New Hampshire, New Jersey, New Mexico, New York, North Carolina (January 1, 2010), Ohio, Oregon (January 1, 2009), Rhode Island, South Dakota (July 1, 2009), Utah (extends to bars Jan. 7, 2009), Vermont, Washington, and Wisconsin (July 5, 2010).

by their provider within the last 12 months. hh,38 Appropriate medication is another effective method for treating tobacco dependence. However, in 2007, 61.6% of smokers in North Carolina reported that their health care provider did not "recommend or discuss medication to assist them with quitting smoking." Moreover, national survey data show less than a quarter of current smokers who tried to quit in 2000 used cessation medications.8

Smoking cessation treatment (i.e. counseling and pharmacotherapy) has been called the "gold standard" of preventive interventions due to the cost savings gained by eliminating tobacco use.

Smoking cessation treatment (i.e. counseling and pharmacotherapy) has been called the "gold standard" of preventive interventions due to the cost savings gained by eliminating tobacco use.<sup>37</sup> Insurance coverage of tobacco cessation counseling and pharmacotherapy supports primary care providers in providing tobacco use treatment. Research shows that medication and counseling are most effective when used together, and they should be covered benefits for all enrollees and all enrollees should be aware of them.8 A Healthy People 2010 goal is to "increase insurance coverage of evidence-based treatment for nicotine dependency to 100%."40 However, many North Carolinians lack health insurance that provides low- or no-cost tobacco use cessation coverage for counseling and appropriate medications. While the major insurance plans in North Carolina all offer some tobacco cessation products, benefits, or buy-up programs, out-of-pocket costs for individuals remain.<sup>41</sup> These costs can be significant depending on the plan and the individual's ability to pay. The CDC Community Guide recommends reducing out-of-pocket costs for effective cessation therapies to increase the use of effective therapies, the number of people who attempt to quit, and the number of people who successfully quit.<sup>19</sup> In addition, some insurance coverage has lifetime limits on tobacco cessation treatment. Limiting access to treatment is problematic when one considers the chronic nature of tobacco dependence as most tobacco users cycle through remission and relapse for several years.8

hh The NCIOM has long recognized the multiple demands placed on primary care providers who face significant challenges providing all the recommended care to their patients. There are more than 1,800 evidence-based clinical guidelines to treat patients with different health conditions, and new guidelines continuously evolve for various health conditions. (Agency for Healthcare Research and Quality, US Department of Health and Human Services. National Guideline Clearinghouse. http://www.thecommunityguide.org/about/. Published June 23, 2009. Accessed July 31, 2009.) It would take more than 17 hours each day for primary care providers to provide all the evidence-based preventive services and recommended services to a typical daily patient panel. (Bodenheimer T. Primary care—will it survive? N Engl J Med 2006; 355(9):861-864. Ostbye T. Is there time for management of patients with chronic diseases in primary care? Ann Fam Med 2005; 3(3):209-214. Yarnall KS. Primary care: Is there enough time for prevention? Am J Public Health 2003;93(4):635-641.)

To fully reach the potential that can be realized through tobacco cessation treatment services, the Task Force recommends:

# Recommendation 3.4: Expand Access to Cessation Services, Counseling, and Medications for Smokers Who Want to Quit

- a) Insurers, payers, and employers should cover comprehensive, evidence-based tobacco cessation services and benefits including counseling and appropriate medications.
- b) Providers should deliver comprehensive, evidence-based tobacco cessation services including counseling and appropriate medications.

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