Putting Research and Best Practices into Action to Prevent and Control Tobacco Use in North Carolina

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Tobacco use is the leading preventable cause of death in North Carolina and the nation. It accounts for more deaths than alcohol, drug abuse, car crashes, homicide, suicide, and HIV/AIDS combined. As a matter of public health, tobacco use and its associated diseases have huge costs, and policy changes offer perhaps the greatest opportunities to improve the health and well-being of thousands of North Carolinians. This article describes recent gains in prevention and control of tobacco use in North Carolina. Also, it provides a constructive framework for decision makers to use in improving the health of North Carolinians and reducing their health care costs.

Most people who become users begin using tobacco in early adolescence, and almost all people who become users begin before age twenty-four. The average age of initiation is between twelve and fourteen. Of those who smoke and do not quit, more than half will die prematurely from cigarette-related diseases, losing an average fourteen years of life.[1]

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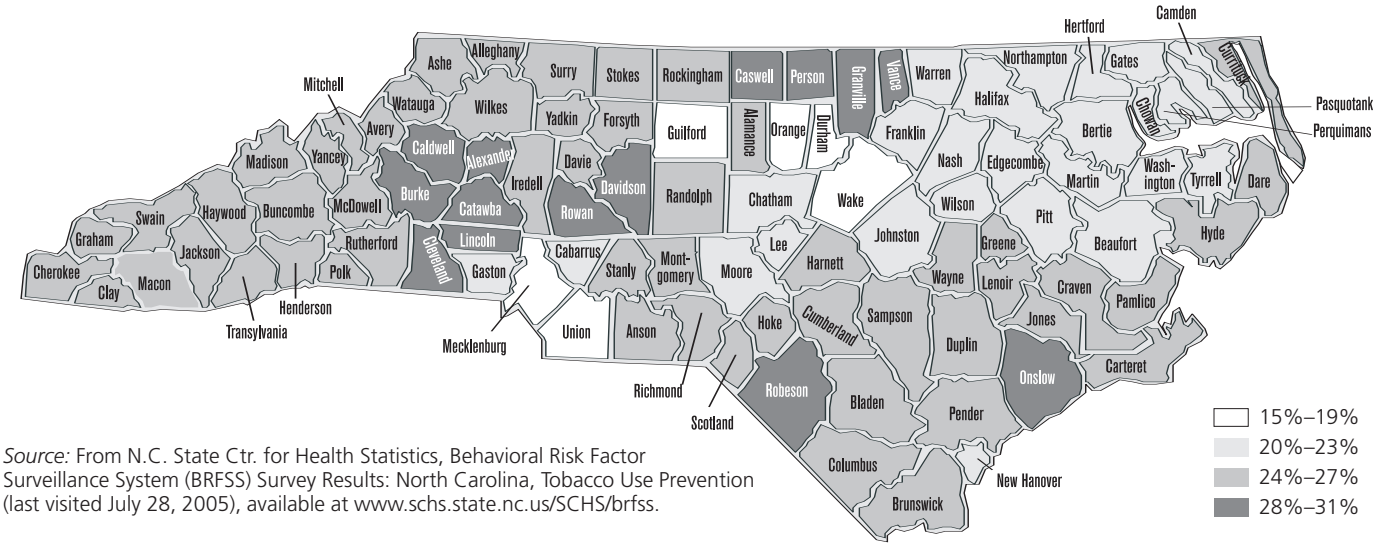
Figure 1. **Prevalence of Adult Smoking in North Carolina, 2004**



Source: From N.C. State Ctr. for Health Statistics, Behavioral Risk Factor Surveillance System (BRFSS) Survey Results: North Carolina, Tobacco Use Prevention (last visited July 28, 2005), available at www.schs.state.nc.us/SCHS/brfss.

In addition to the health risks that smokers face, evidence mounts on the serious health consequences of exposure to secondhand smoke. It has been shown to cause lung cancer and heart disease in nonsmoking adults, and respiratory infections, chronic ear infections, and asthma in children and adolescents. There is no known safe level of exposure to secondhand smoke. A recent study by the Centers for Disease Control and Prevention (CDC) concludes that even limited exposure can precipitate a heart attack in someone with coronary heart disease.[2]

Not only does tobacco use cost lives, but it costs the state billions of dollars a year in medical costs and lost productivity. In North Carolina in 1998, the last year for which medical costs attributable to tobacco use were isolated from other costs of tobacco use, the medical costs were $1.9 billion (see Table 1). In 2002, tobacco use cost North Carolina an estimated $5.4 billion in medical and productivity costs. Further, for that same year, North Carolina's Medicaid costs attributable to smoking were estimated to be more than $940 million, or $113.23 per capita (see Table 1).

North Carolina's Changing Policy Environment for Tobacco Use

Tobacco use in North Carolina is beginning to decline but still is prevalent: 22 percent of the adult population currently smokes. Rates of smoking vary by age group: The highest rate, 28 percent, is among young adults aged 18–24. From there the rates decline gradually across age groups until adults aged 65 and older, whose rate is less than 13 percent. Rates of tobacco use, including cigarettes and other tobacco products,

Table 1. **Tobacco-Related Monetary Costs in North Carolina**

In 1998 Dollars	
Annual health care expenditures directly caused by tobacco use	$1.92 billion
Total Medicaid program payments caused by tobacco use	$600 million
Citizens' state and federal taxes to cover smoking-caused government expenditures	$1.59 billion ($488 per household)
Smoking-caused productivity losses	$2.82 billion
Smoking-caused health costs and productivity losses per pack sold	$6.59
In 2002 Dollars (Estimated)	
Smoking-caused health costs and productivity losses	$5.4 billion
Total Medicaid costs attributable to smoking	$940 million ($113.23 per capita)

Source: Base numbers are from Office on Smoking, Centers for Disease Control and Prevention, Sustaining State Programs for Tobacco Control: Data Highlights 2004 (Atlanta: CDC, n.d.), available at www.cdc.gov/tobacco/datahighlights/page6.htm. Expenditure forecasts are based on an N.C. population of 8,307,748.

Note: Other nonhealth costs caused by tobacco use, in 1998 dollars, include direct residential and commercial property losses from smoking-caused fires (more than $500 million nationwide); the costs of extra cleaning and maintenance made necessary by tobacco smoke and tobacco-related litter (more than $4 billion per year for commercial establishments alone); and additional work-productivity losses from smoking-caused work absences, on-the-job performance declines, and disability during otherwise productive work lives (in tens of billions of dollars nationwide). The productivity loss amount above is solely from work lives shortened by smoking-caused deaths.

have leveled off among high school students and declined slightly among middle school students, to 33.7 percent and 14.3 percent, respectively.[3] Smoking rates also vary geographically, from 15 percent to 31 percent (see Figure 1).

The decline in use is occurring because centuries-old social, economic, and political traditions are slowly giving way to the knowledge gained in recent decades about the health effects of tobacco use and secondhand smoke, and to policies and programs that have been proven to be effective. The 2004–05 session of the North Carolina General Assembly was more active with tobacco- and health-related legislation than any session in the state's history. Among the matters under consideration were a substantial increase in the tobacco tax and restrictions on smoking in restaurants and other public places.

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One factor in this change is the first-time allocation of significant amounts of state funds. The funds are channeled to geographically and ethnically diverse community and school groups that educate people about tobacco use as a public health problem and build support for effective policy solutions. Only a modest amount of federal funds was in place in North Carolina from the early 1990s until 2002. A more recent investment of state dollars in preventing and reducing teenage tobacco use in schools and communities has allowed for greater education about prevention of such use across North Carolina. In 2002, under the Tobacco Master Settlement Agreement, seven tobacco companies being sued by states' attorneys general agreed to change how tobacco products are marketed and to pay the states an estimated $246 billion over twenty-five years. That agreement allowed North Carolina to create the Health and Wellness Trust Fund (HWTF) with about one-quarter of the funds the state received, and to invest a small proportion of them in programs to prevent and control tobacco use by teenagers. The HWTF's Teen Tobacco Prevention and Cessation Program is the recipient of the first dedicated state funding for tobacco prevention and control in North Carolina. Community programs are actively promoting evidence-based interventions to reduce tobacco use by teenagers.

Another major reason for change is that North Carolina is shifting from a tobacco-farming and -manufacturing economy to one based on technology and information. The 2004 tobacco quota buyout, which ended a federal program regulating tobacco production, will compensate tobacco growers and quota holders with $9.6 billion over the next ten years. The largest share will go to growers and quota holders in North Carolina.[4] There now are fewer farm and manufacturing jobs, and there is a decreased perception of "tobacco as king."

Tobacco-farming and -manufacturing interests were the primary source of media coverage of tobacco in North Carolina until the late 1980s and early 1990s, when the National Cancer Institute began to fund programs for prevention and control of tobacco use. From 1993 to 1997, pro-health articles, editorials, and letters to the editor about tobacco in daily newspapers increased from 20 percent to 70 percent, and pro-tobacco news coverage decreased from 22 percent to 5 percent.[5]

In North Carolina, policy decisions have long been based predominately on preserving the economic interests of tobacco farmers, quota holders, and companies rather than on protecting health interests and reducing the costs of health care. For example, a state law passed in 1993, Smoking in Public Places, was part of a national strategy of the tobacco industry to prevent local decision making on prohibition of smoking in workplaces, restaurants, and other public places.[6] Internal tobacco industry documents confirm the power of laws like this. In a draft of a 1994 presentation, Tina Walls of Philip Morris USA wrote, "By introducing pre-emptive statewide legislation we can shift the battle away from the community level back to the state legislatures where we are on stronger ground."[7]

Increased Funding for Prevention and Control Efforts in North Carolina

In 1964 the first Surgeon General's Report warned about the serious health consequences of tobacco, yet North Carolina did not begin to address tobacco use seriously as a preventable public health problem until the late 1980s. From 1986 to 1995, Guilford and Wake counties participated in COMMIT (Community Intervention Trial for Smoking Cessation), a program funded by the National Cancer Institute to demonstrate how community-level interventions could enhance cessation of tobacco use.[8] From 1991 to 1999, the state's Division of Public Health partnered with the American Cancer Society of North Carolina to carry out Project ASSIST (American Stop Smoking Intervention Study), also underwritten by the National Cancer Institute. Nationally, Project ASSIST was funded at about $21.5 million to demonstrate the effectiveness of statewide policy, media, and program interventions in seventeen states. The ASSIST states were compared with thirty-two other states that were funded at about $12 million by CDC, and with California, which had a tobacco control program funded by a state tobacco tax. In North Carolina, Project ASSIST was funded at $8.5 million for seven years. It organized a statewide effort involving ten community-based coalitions covering twenty-three counties and all six media markets. The project used the mass media to promote policy change and thereby to increase the demand for program services. Formal evaluation of Project ASSIST continues, but the comprehensive model created by the National Cancer Institute was deemed a success, and in 1999 the CDC picked up the funding for programs in the health departments of all fifty states.[9]

As noted earlier, the General Assembly created the HWTF in 2002 as an

entity in which to invest some of North Carolina's portion of the Tobacco Master Settlement Agreement. By the terms of the relevant legislation, the HWTF will receive one-fourth of the state's tobacco settlement funds in annual installments over twenty-five years.[10] Under the leadership of Lieutenant Governor Beverly Perdue, the HWTF became the first state funding ever dedicated to addressing tobacco use among youth from a public health perspective. The HWTF's initiative, the Teen Tobacco Prevention and Cessation Program, has been well received by geographically diverse community organizations, school systems, and statewide organizations representing diverse population groups—for example, El Pueblo (representing Hispanics-Latinos), the General Baptist State Convention and the Old North State Medical Society (representing African Americans), and the North Carolina Commission on Indian Affairs. The demand for the program has resulted in the HWTF expanding its funding from $6.2 million in 2003–04 to $15 million in 2005–06.

Comprehensive Policy Initiatives

More is known about how to prevent and reduce tobacco use than is known about perhaps any other modern public health problem. The research is sufficient. What is sometimes lacking is the political will to apply it.

Most people who become users begin using tobacco in early adolescence, and almost all people who become users begin before age twenty-four. The average age of initiation is between twelve and fourteen.

Research shows that comprehensive multifaceted programs, funded in an amount adequate for the size and the diversity of a state's population, are effective in reducing the prevalence of tobacco use; disease, disability, and death caused by tobacco use; and health care costs attributable to tobacco use. Comprehensive programs promote evidence-based interventions that pursue the CDC's four goals:[11]

- *Preventing the initiation of tobacco use among young people*
- *Eliminating nonsmokers' exposure to environmental tobacco smoke . . .*
- *Promoting quitting among young people and adults*
- *Identifying and eliminating the disparities related to tobacco use and its effects among different population groups*

These four goals provide the framework for North Carolina's programs.

Strong research evidence supports specific community-based interventions and policy development in this area. In 2000, Dr. David Satcher, then the assistant secretary for health and the surgeon general of the United States, convened the Task Force for Community Preventive Services. This team of scientists reviewed the research and published the *Guide to Community Preventive Services: Tobacco Use Prevention and Control*.[12] The *Guide* provides state and local decision makers with information and evidence-based recommendations on interventions appropriate for communities and health care systems to reduce tobacco use (for the recommendations, see Table 2).

The task force found that comprehensive programs to control tobacco use provide multiple opportunities to deliver a variety of consistent anti-tobacco messages to different populations through communities, health care systems, and public and private workplaces and other settings (such as schools). No single agency program can address this complex problem alone. The leadership role

for such initiatives varies from state to state but generally takes the form of high-level public policy and public health program stewardship, with active and engaged private partners and community-based coalitions. The delivery of anti-tobacco messages from a variety of sources (for example, the media, physicians, and workplace policies) contributes to individual changes in behavior (such as quitting). Two decades of evidence from state-based prevention programs indicate that the most successful approach for reducing tobacco use is fully funded comprehensive programs that combine or coordinate a variety of interventions.[13] The *Guide* tells what is effective; the challenge to state and local stakeholders is to build community support for putting effective interventions into place.

Effective Strategies and North Carolina's Applications of Them

The surgeon general's task force grouped its recommendations into three types of strategies: strategies to reduce initiation of tobacco use by children, adolescents, and young adults; strategies to reduce exposure to environmental tobacco smoke; and strategies to increase cessation of tobacco use.

Table 2. ***Guide to Community Preventive Services:*** **Interventions for Communities**

Goal	Recommended Interventions
Increase cessation	Increase in price (tax)
	Mass media campaigns*
	Telephone quitlines
	Smoking bans
Reduce initiation	Increase in price (tax)
	Mass media campaigns*
Reduce exposure to secondhand smoke	Smoking bans

Source: Adapted from Centers for Disease Control and Prevention, *Strategies for Reducing Exposure to Environmental Tobacco Smoke, Increasing Tobacco-Use Cessation, and Reducing Initiation in Communities and Health-Care Systems: A Report on Recommendations of the Task Force on Community Preventive Services,* 49 Morbidity and Mortality Weekly Report (No. RR-12, tab. 2, Nov. 2000, at 6–10).

*When combined with other interventions.

Strategies to Reduce Initiation of Tobacco Use

The task force strongly recommends two strategies for reducing tobacco use by children, adolescents, and young adults: an increase in the unit price for tobacco products and mass media campaigns when combined with other (local) interventions. North Carolina has added a third strategy, a campaign to make all of its 115 school districts 100 percent tobacco free.

An Increase in the Unit Price

Despite all that is known about the effectiveness of substantial price increases in reducing the burden of tobacco use on the health of North Carolinians, the

Table 3. **Projected Revenues and Benefits from Various Increases in N.C. Cigarette Tax**

Tax Increase per Pack	$0.25	$.35	$.45	$.50	$.75	$1.00
Additional New State Cig. Tax Revenue (millions/yr.)	$134.7	185.3	232.0	253.9	348.9	419.6
Fewer State Packs Sold/Yr. (millions)	221.6	241.0	260.4	270.1	318.6	367.1
Youth Smoker Decline	5.2%	7.3%	9.4%	10.4%	15.7%	20.9%
Fewer Future Youth Smokers	33,800	47,400	60,900	67,700	101,600	135,400
Related Lifetime Health Savings (millions)	$540.8	$758.4	$974.4	$1,083.2	$1,625.6	$2,166.4
Adult Smoker Decline	1.2%	1.7%	2.2%	2.4%	3.6%	4.8%
Fewer Adult Smokers	18,800	26,400	33,900	37,700	56,600	75,500
Related Lifetime Health Savings (millions)	$159.4	$223.9	$287.5	$319.7	$480.0	$640.2
Youth Future Smoking-Caused Deaths Avoided	10,800	15,100	19,400	21,600	32,500	43,300
Adult Smoking-Caused Deaths Avoided	4,900	6,900	8,900	9,900	14,900	20,000
5-Year Smoking-Harmed Births Avoided	4,380	6,140	7,890	8,770	13,150	17,540
5-Year Heart & Stroke Savings (millions)	$ 8.8	$12.3	$15.8	$17.5	$26.3	$35.0
5-Year Smoking-Births Savings (millions)	$ 6.3	$8.8	$11.3	$12.5	$18.8	$25.0
Overall Long-Term Health Savings (millions)	$700.2	$982.3	$1,261.9	$1,402.9	$2,105.6	$2,806.6

Source: Compiled by Eric Lindblom (Mar. 30, 2005), Campaign for Tobacco-Free Kids, www.tobaccofreekids.org. *See, e.g.*, Frank J. Chaloupka, *Macro-Social Influences: The Effects of Prices and Tobacco Control Policies on the Demand for Tobacco Products*, 1 Nicotine and Tobacco Research (Supp. 1, 1999, at 71), and other price studies available at http://tigger.uic.edu/~fjc and www.uic.edu/orgs/impacteen.

Note: All projected savings are in 2002 dollars and were calculated using the same methodology that the Centers for Disease Control and Prevention have used to update their data on state smoking-related costs. The revenue projections are fiscally conservative because they include a generous adjustment for lost state pack sales (and tax revenues) from new tax-avoidance efforts (tax evasion) by continuing instate smokers after the tax increase. They also adjust generously for resulting fewer sales to smokers from other states, and fewer sales to supply informal smugglers, criminal smuggling organizations, or multistate Internet sellers.

state's cigarette tax, which has been 5 cents per pack since 1993, has ranked fifty-first in the nation. Nationally the average tax per pack is 91.2 cents.[14]

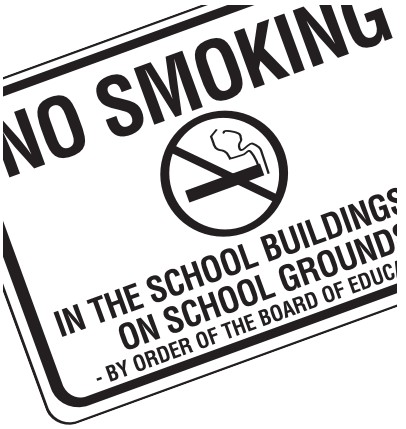
As part of its consideration of the 2005–06 budget, the North Carolina General Assembly wrestled with increasing the state tax on cigarettes and other tobacco products. Governor Michael Easley's budget proposed an increase of 45 cents per pack, with 35 cents to be added in fiscal year 2005–06 and 10 cents in fiscal year 2006–07. The Senate proposed a 35-cent increase for 2005–06, and the House, a 25-cent increase. In August 2005 the General Assembly approved a budget that provides for the following:

- A 25-cent increase in the tax on cigarettes (from 5 cents per pack to 30 cents), effective September 1, 2005
- An additional 5-cent increase (to 35 cents), effective July 1, 2006
- An increase in the tax on other tobacco products from 2 percent of cost to 3 percent of cost

The Task Force on Community Preventive Services found that increasing the price of tobacco products is effective in both (1) reducing the prevalence of tobacco use among adolescents and young adults and (2) increasing cessation of tobacco use. In fact, numerous studies indicate that a 10 percent increase in a product's price results in an overall 3–5 percent decrease in cigarette consumption and a 7 percent decrease in youth smoking.[15]

Regarding the optimum amount for a tobacco tax, the research is clear that from a public health perspective, the greater the increase as a percentage of the price, the greater the public health benefit. The projected health benefits from decreased initiation and increased cessation of tobacco use, and the revenues that would be generated from various increases in North Carolina's low cigarette tax, are considerable (see Table 3). The projections are based on research findings that a 10 percent increase in the price of a pack of cigarettes reduces youth smoking rates by 6.5 percent or more, adult rates by 2 percent, and total consumption by 4 percent.[16]

The North Carolina Alliance for Health is a nonprofit coalition of health advocates that has argued strongly for a 75-cent increase. As of March 2005, it had the endorsement of most major daily newspapers in North Carolina and about 125 organizations.[17] A 2004 survey conducted by the State Center for Health Statistics revealed that 21.5 percent of North Carolina adults favor a cigarette tax increase of $.50–$1.00 and 34.6 percent favor a cigarette tax increase of more than $1.00.[18]



A 100 percent tobacco-free school policy prohibits tobacco use by anyone, anywhere, anytime, on school property or at school events. Such a policy helps prevent tobacco use by teenagers by providing positive role models in schools, and it helps tobacco users quit.

Mass Media Campaigns When Combined with Other Interventions

The task force found that mass media campaigns were effective in reducing tobacco use by children, adolescents, and young adults when they were combined with other tobacco-control measures. As noted earlier, the HWTF provided the first state funding for mass media campaigns in North Carolina. It allocates funds for tobacco control interventions to seventy geographically and culturally diverse organizations, including communities, schools, and groups representing priority populations (Hispanics-Latinos, Native Americans, and African Americans). They must spend the money on policies and programs that affect children and teenagers.

In 2005 the HWTF allocated some of its assets for use with college-age populations, and North Carolina colleges and community colleges submitted strong applications. The highest rates of tobacco use in North Carolina occur in these settings.

The HWTF's paid media campaign, Tobacco. Reality. Unfiltered, commonly known as TRU, is the first North Carolina campaign aimed at prevention of tobacco use that is paid for by the state government.[19] It follows research that indicates the effectiveness of showing real people telling true stories about the devastating human consequences of tobacco use. Dr. Adam Goldstein of Family Medicine at the University of North Carolina (UNC) at Chapel Hill, an independent evaluator of the HWTF's Teen Tobacco Prevention and Cessation Program, studied the campaign and commented,

> *Virtually all the experimentation in smoking that occurred in non-susceptible, non-smoking youth at baseline [of the evaluation study] occurred among those unaware of the campaign . . . This translates into approximately 9,000 fewer youths experimenting with tobacco than might have occurred without their having seen the campaign. Ultimately, this would translate into almost $4 million of cost savings in preventing future tobacco-related diseases among North Carolina citizens.*[20]

Tobacco-Free Schools Campaign

One of the successes of the HWTF's Teen Tobacco Prevention and Cessation Program has been accelerated progress in making all North Carolina schools 100 percent tobacco free. A 100 percent tobacco-free school policy prohibits tobacco use by anyone, anywhere, anytime, on school property or at school events. Such a policy helps prevent tobacco use by teenagers by providing positive role models in schools, and it helps tobacco users quit. It has been well received by local school leaders.

Some Frequently Asked Questions about Local Governments' Authority to Regulate Smoking in Public Places

What May Local Governments Do within Their Jurisdictions to Regulate Smoking in Public Places?
In 1993 the North Carolina General Assembly enacted a law that limits local governments' authority to regulate smoking in public places.[1] Dividing buildings and facilities into five categories may help readers understand how this state law and its various exceptions fit together (see Table 1). In short, the law allows local governments to regulate smoking in certain facilities, including buildings owned by local governments (category 1), but not in restaurants, bars, and most other private establishments (category 5). If a local government regulates smoking in certain buildings, it must designate at least 20 percent of the interior space for smoking unless doing so is "physically impracticable." The smoking areas must be of equal quality to the nonsmoking areas.

For example, a county builds a new courthouse, and it does not have a local ordinance or rule controlling smoking. The county must try to reserve 20 percent of the interior space of the courthouse for smoking unless it determines that doing so is physically impracticable. In that case the county must reserve a smoking area that is as near as possible to 20 percent.

There are several exceptions to the 20 percent requirement, such as schools (category 4) and buildings housing local departments of health and social services (category 2). Also, if a local government had a valid ordinance or board of health rule in place before 1993 that is more restrictive than the state law, the local law may remain in place. The restrictions just described apply only to ordinances and rules adopted after October 1993.

What Does "Physically Impracticable" Mean?
As explained earlier, facilities in category 1 must reserve 20 percent of their interior space for smoking unless doing so is physically impracticable. The state law does not define "physically impracticable," and North Carolina's courts have not yet defined the term in the context of smoking areas in local government buildings. However, in a different context, the North Carolina Court of Appeals has compared the meanings of "impracticable" and "impossible."[2] The court stated that the *Oxford English Dictionary* defines "impossible" as "not possible," whereas it defines "impracticable" as "impossible in practice" or impossible to do effectively.[3]

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Because courts have yet to interpret the meaning of "physically impracticable" in the context of regulating smoking, a local government must consider the definition given by the North Carolina Court of Appeals and use its best judgment in deciding if and when designating less than 20 percent of the interior space of any given building for smoking is physically impracticable. Some local governments have concluded, for example, that designating *any* interior space of a facility for smoking is physically impracticable because the facility's ventilation system recirculates the smoke-filled air and puts all employees at risk. Using this rationale, they have prohibited smoking entirely inside certain buildings. Until such local laws are challenged, it is not clear whether courts will support this interpretation of "physically impracticable."

Are Local Boards of Health Subject to Any Additional Restrictions on Their Authority to Adopt Rules Regulating Smoking?
Yes. In addition to the general statutory limitations placed on the authority of local governments to regulate smoking, local boards of health are subject to limitations on the scope of their authority because they are appointed bodies rather than elected legislative bodies.

In *City of Roanoke Rapids v. Peedin*, the North Carolina Court of Appeals explained the limitations on the boards' rule-making authority in the context of a smoking regulation case.[4] In Halifax County on October 12, 1993, the board of health enacted Halifax County Smoking Control Rules. The rules included restrictions on various types of facilities, such as restaurants and bars. These rules were subsequently challenged, and the North Carolina Court of Appeals overturned them in 1996.[5] The court created a five-part test to which North Carolina boards of health must adhere in making new rules:[6]

1. The rules must be related to the promotion or protection of health.
2. They must be reasonable in light of the health risk addressed.
3. They must not violate any law or constitutional provision.
4. They must be nondiscriminatory.
5. They must not make distinctions based on policy concerns traditionally reserved for legislative bodies.

The court relied primarily on the fourth and fifth criteria to invalidate the board's smoking control rules. The board had established different rules for restaurants based on how large they were and whether or not they had a bar. The court

For example, Robert Logan, superintendent of Asheville City Schools, says,

> *Our tobacco-free schools policy not only has helped to prevent and intervene in youth tobacco use, but also has helped employees to stop tobacco use. The success of the policy in our district has served as a catalyst to address other childhood health issues such as childhood obesity and juvenile diabetes.*[21]

Although many school systems adopted a tobacco-free policy early in the campaign, some school boards were not convinced that they had the clear authority to do so. They feared lawsuits based on the 1993 law.

concluded that the rules discriminated inappropriately because they protected the health of employees in some restaurants but not in others, and they made policy distinctions reserved for legislative bodies when they allowed smoking in some restaurants (that is, small restaurants and restaurants with bars) but not in others.

With respect to the second conclusion, the court inferred that the board drew these policy distinctions on the basis of reasons unrelated to public health, such as potential economic hardship and difficulty of enforcement. The court explained that the board of health must consider only health as a factor in its rule-making process unless a legislative body (such as the General Assembly or a board of county commissioners) specifically directs it to consider other factors (such as economic ones).

Additional information about the authority of local governments to regulate smoking in public places is available at www.ncphlaw.unc.edu.

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Notes

1. N.C. GEN. STAT. §§ 143-595 through -601 (hereinafter G.S.).
2. Morris v. E. A. Morris Charitable Foundation, 589 S.E.2d 414, 416 (N.C. Ct. App. 2003) (holding that testator's intention regarding piece of property was impossible or impracticable to fulfill because function and purpose of property had changed).
3. *Id.* The court used the terms together, and it offered the example that a gift to a charity that never existed is impossible, whereas a gift to a charity that is so vaguely described that it cannot be identified is impracticable.
4. City of Roanoke Rapids v. Peedin, 478 S.E.2d 528 (N.C. Ct. App. 1996).
5. *Id.*
6. *Id.*

Table 1. **North Carolina Local Government Authority to Regulate Smoking, by Category of Building or Facility**

Category	Buildings or Facilities	Local Government Authority (Local Ordinances or Board of Health Rules)
1	Buildings owned, leased, or occupied by local government Public meetings	May establish nonsmoking areas. Twenty percent of interior space of equal quality must be smoking area unless physically impracticable. If 20% is physically impracticable, smoking area must be as near as possible to 20%.
2	Child care centers Hospitals, nursing and rest homes, and mental health facilities Nonprofits that focus on tobacco use prevention Enclosed elevators Tobacco manufacturing, processing, and administrative facilities Libraries and museums open to public Public transportation owned or leased by local government Buildings housing local health departments and departments of social services, including grounds surrounding buildings (up to 50 ft.) Indoor arenas with seating capacity greater than 23,000	May regulate/prohibit smoking. Regulation is not subject to 20% requirement.
3	Indoor spaces of auditoriums, arenas, and coliseums or appurtenant buildings (except arenas with seating capacity greater than 23,000)	May regulate/prohibit smoking. Must designate space for smoking in lobby area. Regulation is not subject to 20% requirement.
4	Schools and school buses	Smoking is prohibited in school buildings during school hours. Local boards of education have broad authority to regulate smoking on all other school property (it is not subject to 20% requirement).
5	Other public places, including restaurants and bars	No authority

The 2003–04 North Carolina General Assembly removed this barrier by giving clear authority to local school boards to set stricter policy standards than the federal guidelines, which prohibit smoking in school buildings. At this writing, considerably more than half of the state's 115 school districts have passed 100 percent tobacco-free policies (see Figure 2), thirty-nine of them with help from the state's Tobacco Prevention and Control Branch and the HWTF's Teen Tobacco Prevention and Cessation Program.[22] Lieutenant Governor Perdue, the HWTF, and the State School Board, led by Chair Howard Lee, have championed this effort.

Evidence-Based Policies and Strategies to Reduce Secondhand Smoke

The second policy goal of the state is to eliminate exposure to secondhand smoke, which has been estimated to be the third leading preventable cause of death. Even short-term exposure may increase a person's risk of experiencing a heart attack. For example, an observational study in Helena, Montana, published in 2004, demonstrated a 40 percent reduction in hospital admissions for acute myocardial infarctions during a six-month ban on smoking in public places and in workplaces. After the ban was suspended because of a legal challenge, hospital admissions rebounded to previous levels.[23]

The Task Force on Community Preventive Services found that increasing the price of tobacco products is effective in both (1) reducing the prevalence of tobacco use among adolescents and young adults and (2) increasing cessation of tobacco use.

Smoking Bans and Restrictions

The primary recommendation of the surgeon general's task force regarding exposure to secondhand smoke is to implement restrictions and bans on smoking. The task force found that no-smoking policies reduced exposure to secondhand smoke by about 74 percent. Moreover, studies of worksites with no-smoking policies have shown that employees in these settings experience increased success in quitting tobacco use.[24]

Other studies show similar results. For example, a 1999 national survey conducted by the Research Triangle Institute reported that having a 100 percent smoke-free workplace reduced smoking prevalence by 6 percentage points and reduced average daily consumption among those who continued to smoke by 14 percent, compared with workers subject to minimal or no restrictions. The survey also showed that allowing smoking in some common areas lessened the impact of work-area bans, and that smoke-free policies reduced smoking for all demographic groups and in nearly all industries. The authors of this study concluded, "Requiring all workplaces to be smoke-free would reduce smoking prevalence by 10 percent. Workplace bans have their greatest impact on groups with the highest rates of smoking."[25]

Across the nation, some states restrict the authority of local governments to regulate smoking. The American Medical Association has stated that such preemption laws are "the tobacco industry's top legislative goal, because [they] concentrate[] authority at the state level where the industry is stronger and can more readily protect its interest."[26] As noted earlier, North Carolina passed its preemption law in 1993. Called the "dirty air law" by some, it requires state-controlled buildings to have some smoking areas and limits the ability of local governments to restrict smoking in public places, like restaurants and government-owned buildings (for more information about the law, see the sidebar on page 52).

Since the adoption of the preemption law in 1993, the state has taken a few small steps either to limit secondhand smoke in public places or to permit state or local government agencies to restrict smoking in certain public places. In 2003–04 the North Carolina General Assembly created rules to make both the House and the Senate floor smoke free while legislatures are in session. It also exempted many state university buildings, including most dormitories, from the state's preemption law. This action allowed the campuses of the UNC system to enact smoke-free policies in many buildings. Dormitories at Elizabeth City State College, North Carolina Central University, UNC at Chapel Hill, UNC–Greensboro, and UNC–Wilmington have since become smoke free.

In 2005 the North Carolina Association of Local Health Directors requested legislation (H.R. 239) to exempt any building that houses a local health department, including 50 feet of grounds surrounding the building, from the state's preemption law. Not only did H.R. 239 become law, but it prompted H.R. 1482, a bill to allow local social services departments to declare their buildings and 50 feet of surrounding grounds smoke free. H.R. 1482 also became law.[27]

Two other smoking-related bills passed in 2005. The first, S. 482, allows regulation of smoking in indoor arenas with a seating capacity of more than 23,000.[28] It would likely apply only to regulation of smoking in the Greensboro Coliseum. The second, S. 1130, prohibits the use of tobacco products inside state prisons.[29] The smoking ban will be phased in over time. In addition, the Department of Correction will be conducting at least one pilot program to test a smoking cessation program for staff and inmates.

Preemption of local authority to regulate smoking is not likely to be overcome until local elected officials actively seek control over this issue. In January 2005, to reassert local control, the Mecklenburg County commissioners endorsed the proposal of a citizens group called Smoke-Free Charlotte that the delegation representing the county in the General Assembly be asked to request exemption from the state's preemption law. Smoke-Free Charlotte's website states,

> *The NC General Assembly passed a law in 1993 (GS 143-595-601) prohibiting any local government from banning smoking in public places. Smoke-Free Charlotte is asking for an exemption from this law for Mecklenburg County. If granted, this exemption will allow the county to pass its own ordinance, if it chooses to do so, which will*

protect its citizens, workers and visitors from the health hazards of secondhand smoke.[30]

Although Smoke-Free Charlotte has strong grassroots backing and the endorsement of the county commissioners, it needs to increase its support among the ten-member Charlotte-Mecklenburg delegation to the House of Representatives. Smoke-Free Charlotte plans to continue promoting nonsmoking policies to protect the health of citizens and to encourage businesses, particularly those in the restaurant and service industry, to put forth a healthy, nonsmoking image.

Despite the legal and policy barriers, significant voluntary progress has been made in recent years, particularly with private smoke-free policies in white-collar worksites. More than 73 percent of the North Carolina indoor workforce now is covered by a nonsmoking policy for public and work areas at their worksites, compared with less than 33 percent in 1992. Although the state has made consistent progress in protecting workers from job-related secondhand smoke, some workers are less protected than others. For example, blue-collar and service workers are considerably less protected than white-collar workers are.[31]

Strategies to Increase Cessation of Tobacco Use

In the *Guide to Community Preventive Services,* the surgeon general's task force outlines a number of evidence-based strategies to increase the cessation of tobacco use. Recommendations for the community setting include increasing the price of tobacco (via a tax), introducing smoking bans, conducting mass media campaigns, and providing proactive telephone quitlines. (A "quitline" is a telephone service that tobacco users may call to receive comprehensive assistance with quitting from trained cessation counselors. On a "proactive" telephone quitline, counselors may call users back.) Recommendations for health care systems include decreasing out-of-pocket costs for cessation services for patients, establishing systems in the practice setting to remind providers to deliver cessation counseling, and providing proactive telephone quitlines. Mass media campaigns, telephone quitlines, and provider reminder systems are most effective when combined with any of the other interventions (smoking bans, etc.).

Earlier sections discuss the tobacco tax, smoking bans, and mass media campaigns. This section addresses provider reminder systems, reduction of out-of-pocket costs, and telephone quitlines.

Provider Reminder Systems

In North Carolina, tobacco control advocates and public health officials have made great strides in educating health care professionals about effective cessation counseling and about implementing such an intervention in their practices, primarily because of the establishment of a statewide infrastructure to promote cessation, known as Quit Now NC! This initiative, launched in 2003, promotes the evidence-based cessation counseling methods published in 2000 by the Public Health Service and trains health care providers in how to provide this counseling.[32] It also fosters partnerships, influences policies, sponsors conferences, and develops resources for a healthier North Carolina. Quit Now NC! continues to work to help providers establish cessation reminder systems and other components of cessation counseling in their practice settings.

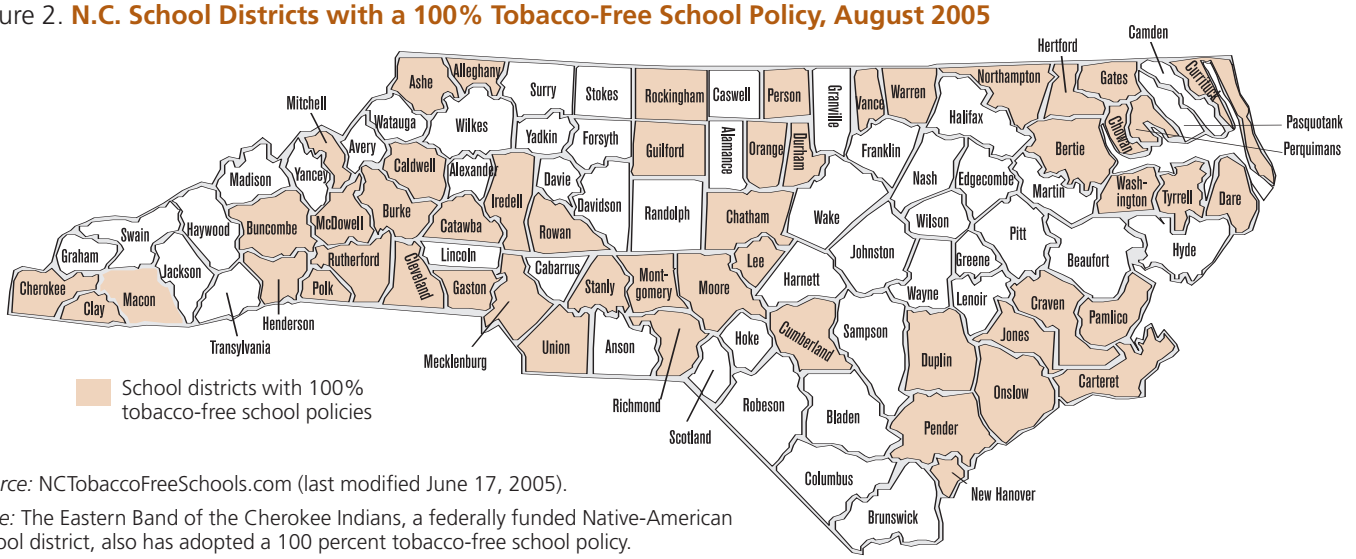
Reduction of Out-of-Pocket Costs

Because of efforts by North Carolina Prevention Partners, a nonprofit organization dedicated to improving the health of North Carolinians through prevention, health care insurers in North Carolina are increasingly covering treatment for tobacco use as a basic benefit. On its website, North Carolina Prevention Partners tracks what benefits are covered.[33]

North Carolina Medicaid also has made progress. Currently it covers prescription drugs that are approved by the Food and Drug Administration for cessation of tobacco use and over-the-counter nicotine-replacement medications. However, it still does not cover cessation counseling.

The State Health Plan, which provides health care coverage for all state employees, is piloting a cessation benefit, with the goal of incorporating it into the plan depending on findings from the pilot study. Results are due in late 2005.

Figure 2. **N.C. School Districts with a 100% Tobacco-Free School Policy, August 2005**



Source: NCTobaccoFreeSchools.com (last modified June 17, 2005).

Note: The Eastern Band of the Cherokee Indians, a federally funded Native-American school district, also has adopted a 100 percent tobacco-free school policy.

Quitlines

With funding from the CDC and the HWTF, North Carolina now has a statewide proactive quitline for youth and adults. This free, evidence-based, comprehensive service, available at 1-800-QUIT-NOW, provides effective cessation support for all North Carolinians who want to quit using tobacco. Participants may choose to have cessation specialists call them back at agreed-on times to answer questions and check on quitting progress. Special protocols are available for pregnant women and for users of spit tobacco. The quitline operates from 8 A.M. to midnight seven days a week, in multiple languages, including Spanish.

Treatment for dependence on tobacco is not only clinically effective but also cost-effective. Smoking cessation treatments compare favorably with routine medical treatments such as those for hypertension and high cholesterol. In fact, they have been referred to as the "gold standard of preventive interventions."[34] Quitlines have been found to be just as effective as more traditional interpersonal or group counseling and may be more efficient in terms of cost.[35]

Funding for Programs to Address Tobacco Use

The research not only recommends evidence-based interventions to address tobacco use but also speaks to funding levels adequate to support such interventions. In 1999 the CDC published *Best Practices for Comprehensive Tobacco Control Programs*.[36] This resource estimates that North Carolina should invest a minimum of $42.6 million annually in evidence-based interventions at the state and community levels. Current federal funding, plus the state investment of HWTF dollars, amounts to 35 percent of that minimum expenditure and ranks North Carolina twenty-first in the nation in spending on prevention and control of tobacco use (see Table 4).

Future Policy Directions for North Carolina

North Carolina leaders are to be congratulated for increasing the cigarette tax to 35 cents. Increasing the tobacco tax toward the national average (91.7 cents) will provide additional health benefits and cost savings for North Carolinians. Challenges to continued tobacco-control funding and effective evidence-based policy remain, however. If North Carolina is to make further progress, its leaders must take more steps to implement what is known to be effective:

- Rescind North Carolina's preemptive "dirty air law," which does not reflect what researchers and practitioners now clearly know about the serious and immediate risks of secondhand smoke. If this barrier were eliminated, the state could set a minimum standard that all workplaces and surrounding grounds be smoke free (or at least all workplaces covered by the State Health Plan) and, what is more important, allow local governments to enact and enforce stricter standards.
- Commit themselves to increasing funding over the next 4–6 years to at least the minimum recommended by the CDC in *Best Practices*.
- Maintain a commitment to that funding level until tobacco use by teenagers and young adults drops below 10 percent.
- Fund programs to meet the needs of all populations struggling with addiction to tobacco, regardless of age, including adults, pregnant women, and disparate populations in which the prevalence of tobacco use or of health problems attributable to tobacco use is higher than average. Also, adequately fund the North Carolina quitline and market the services to disparate populations.
- Provide comprehensive coverage of evidence-based treatment for cessation of tobacco use to people eligible for Medicaid and to state employees. Further, encourage private employers to cover such treatment. Coverage should include all drug therapy and tobacco use counseling approved by the Food and Drug Administration and provided through the North Carolina quitline.

Treatment for dependence on tobacco is not only clinically effective but also cost-effective. Smoking cessation treatments compare favorably with routine medical treatments such as those for hypertension and high cholesterol.

Although currently falling short of the CDC's recommendation, funding of tobacco control efforts in North Carolina has increased in the last two years. Also, momentum is growing for implementation of effective policy interventions.

North Carolina is making tremendous strides in preventing and reducing tobacco's toll on health and the health care economy. Solid scientific evidence indicates what is effective. Diverse geographic populations support change. Strong state and local advocates are working to advance evidence-based efforts. North Carolina now needs to implement all that research and best practice have shown to be effective.

Table 4. **State Spending on Tobacco Prevention**

	Fiscal Year 2004	Fiscal Year 2005
Spending on tobacco prevention	$10.9 million	$15.0 million
Percent of CDC–recommended minimum ($42.59 million)	25.59%	35.22%
Rank among states (1–51)	30	21

Source: Adapted from Campaign for Tobacco-Free Kids, Special Reports: State Tobacco Settlement (last modified Dec. 2, 2004), available at www.tobaccofreekids.org/reports/settlements/state.php?StateID=NC.

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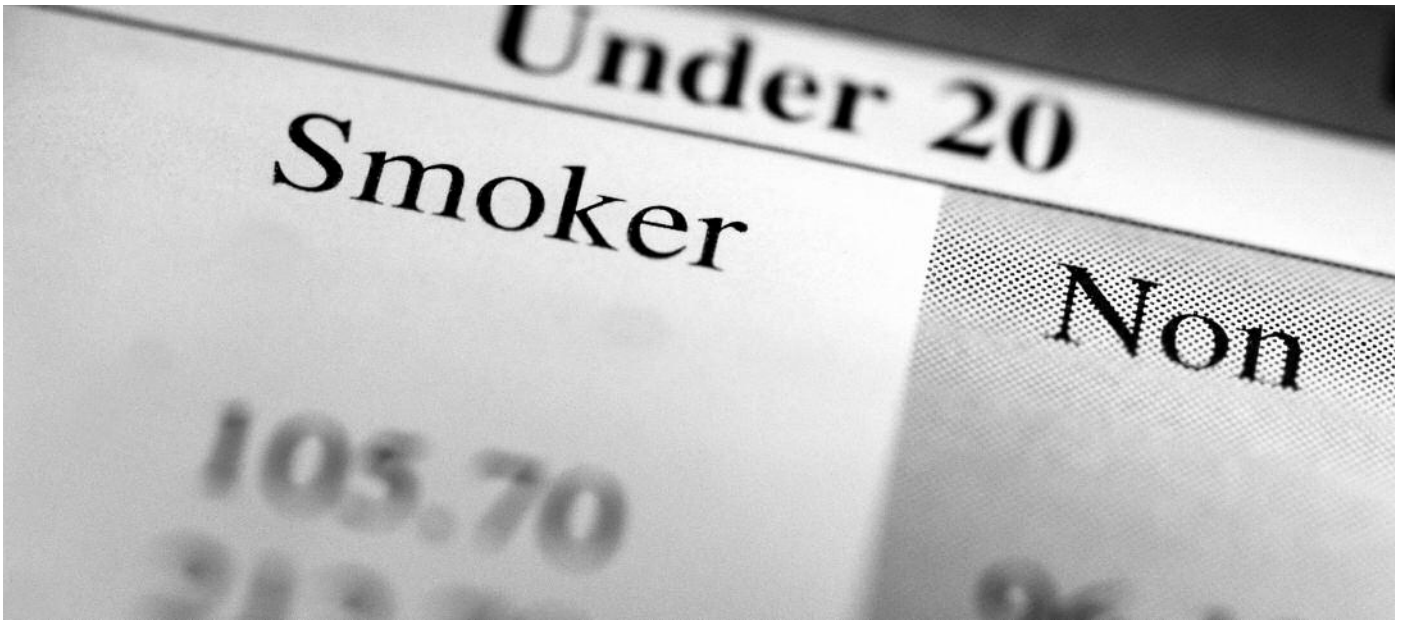

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at the School

Scholarship Fund to Honor Aycock

In August 2005, C. Ronald Aycock retired as executive director of the North Carolina Association of County Commissioners (NCACC), a position that he held for twenty-eight years. He spent his entire working career in North Carolina and more than half his life working for and representing counties and local governments in North Carolina. No single honor can adequately reflect his legacy, but an idea conceived by former NCACC Deputy Director Ed Regan will ensure that Aycock's contributions to North Carolina local governments will not be forgotten.

The NCACC and the School of Government have established the C. Ronald Aycock Public Administration Scholarship Fund. An annual scholarship will benefit a student in The University of North Carolina at Chapel Hill's Master of Public Administration Program who has shown an interest in working for local governments in the Tar Heel State.

So far, more than $67,000 has been raised for the scholarship fund at the School of Government, including donations by more than thirty county governments. It is not too late to contribute. Contributions are accepted via mail or, if you are using a credit card, by fax. Please make your checks payable to the SOG Foundation—Aycock #0527, and send them to School of Government Foundation, CB# 3330 Knapp-Sanders Building, UNC at Chapel Hill, Chapel Hill, NC 27599-3330.

Credit card payments and pledges also may be faxed to Ann Simpson at (919) 843-2528. You may download a pledge form at the NCACC's website, at www.ncacc.org/documents/aycockscholarship.pdf.

The School of Government sincerely thanks the NCACC and all who have contributed to this important scholarship.