2004 Georgia Tobacco Surveillance Report



Acknowledgements

Georgia Department of Human Resources

B.J. Walker, Commissioner

Division of Public Health

Kathleen E. Toomey, M.D., M.P.H., Director

Chronic Disease Prevention and Health Promotion Branch

Carol Steiner, R.N., M.N., Acting Director

Tobacco Use Prevention Section

Carol Steiner, R.N., M.N., Acting Director

Epidemiology Branch

Paul A. Blake, M.D., M.P.H., Director

Chronic Disease, Injury, and Environmental Epidemiology Section

Kenneth E. Powell, M.D., M.P.H., Chief

Division of Mental Health, Developmental Disabilities and Addictive Diseases

Gregory C. Hoyt, Acting Director

Addictive Diseases Section

Bruce Hoopes, MSW, CAC II, Chief

Georgia Cancer Coalition

William J. Todd, President

Nancy M. Paris, Vice-President

Georgia Department of Revenue

Bart L. Graham, Commissioner

Alcohol and Tobacco Division

Ronald D. Johnson, Director

Data for this report were provided by: Manxia Wu, M.D., M.P.H., Surveillance and Special Studies; Linda Martin, M.S., BRFSS Coordinator; Emily Kahn, Ph.D., Chief, Maternal and Child Health; and Travis Fretwell, MAC, NCAC II, CCS, State Synar Coordinator/Addictive Diseases Specialist.

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Further information on this report may be obtained by contacting: Argelia Figueroa, M.Sc., Georgia Department of Human Resources, Division of Public Health, Chronic Disease, Injury, and Environmental Epidemiology Section. 2 Peachtree St., 14.494, Atlanta, GA 30303-3142 404-463-4629 afigueroa@dhr.state.ga.us

For more information about the Tobacco Use Prevention Program contact Delmonte Jefferson, Georgia Department of Human Resources, Division of Public Health, Chronic Disease Prevention and Health Promotion Branch. 2 Peachtree St., 16th Floor, Atlanta, GA 30303-3142 404-657-6611 dpjefferson@dhr.state.ga.us





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Executive Summary

Tobacco use, particularly cigarette smoking, is a leading preventable cause of death in Georgia and the United States.

Mortality

- Over 11,000 adult Georgians die every year from tobacco-related illnesses.
 - o About 4,200 die from cancer
 - o About 4,200 die from cardiovascular diseases
 - o About 2,600 die from respiratory diseases
- About 26 infants die every year because their mothers smoked during pregnancy.

Economic Costs

- \$1.8 billion in healthcare costs in Georgia for adults 18 years and older are attributed to smoking annually.
- \$2.9 billion in lost productivity costs in Georgia for adults 18 years and older are attributed to smoking annually.
- \$9 million in infant healthcare costs in Georgia are attributed to smoking annually.

Tobacco Use in Georgia

- 24 percent of adult Georgians smoke cigarettes
- The prevalence of current smoking among adults is significantly higher among younger age groups and those with fewer years of education.
- 8 percent of pregnant women in Georgia smoke during pregnancy
- 9 percent of middle school and 24 percent of high school students in Georgia smoke cigarettes
- Gas stations and convenience stores are the most common places where Georgia youth purchase their cigarettes.

Reducing Tobacco Use in Georgia

- 59 percent of adult Georgian smokers stopped smoking cigarettes for one day or longer during the previous year because they wanted to quit
- 76 percent of callers to the Georgia Tobacco Quit Line made at least one attempt to quit smoking and 21 percent had not used tobacco for 30 days or more

Policy and Environment Surveillance

- 98 percent of public middle and high schools in Georgia had policies prohibiting tobacco use, but only about half
 of middle (56 percent) and high (55 percent) schools had a designated employee responsible for enforcement of
 the policies
- 90 percent of Georgia worksites had a formal policy prohibiting smoking on the job
- 38 percent of county governments and 14 percent of city governments in Georgia have ordinances related to tobacco use
- About 16 percent of retailers sell tobacco to persons younger than 18 years of age

Introduction

The effect of tobacco use on health has been a topic of research since the beginning of the 20th century (1). Many epidemiological and clinical studies provide evidence of a causal relationship between tobacco use and disease, disability, and death. Tobacco use is related to many health conditions (Table I) and is recognized as one of the most common preventable causes of death in the United States (2). Cigarettes, the most commonly used tobacco product in the nation, are not only harmful to smokers but also to non-smokers who are exposed to secondhand smoke (3). Over the past 35 years, the nationwide percentage of smokers has declined, falling from 40 percent in 1965 to 23 percent in 2000 (4, 5, 6); still many people continue to smoke. Tobacco is responsible for more than 11,000 deaths, more than 190,000 years of potential life lost, and approximately \$1.8 billion in direct adult medical costs in Georgia every year. In the United States, it is responsible for more than 440,000 deaths, more than 5 million years of potential life lost, and \$75 billion in direct adult medical costs (2, 7).

Table 1. Causes of death for which tobacco is contributing cause

Causes of death

Cancer

Lip, oral cavity, pharynx Esophagus Pancreas Larynx

Trachea, lung, bronchus

Cervix Bladder

Kidney and renal pelvis

Cardiovascular diseases

Hypertension Ischemic heart disease Other heart disease Stroke

Atherosclerosis
Aortic aneurysm
Other diseases of
circulatory system

Respiratory diseases

Pneumonia, influenza Bronchitis, emphysema Chronic airway obstruction

Perinatal conditions

Short gestation /
Low birth weight
Respiratory distress
syndrome
Respiratory conditions –
newborn
Sudden infant death
syndrome



This report describes the array of surveillance activities pertaining to tobacco use in Georgia. It provides information about a) the toll of tobacco on Georgians in terms of smoking-related diseases and their associated costs, b) the prevalence of smoking among Georgia adults and youth, and c) efforts to reduce the burden of smoking through quit line services and policy and environmental measures. It describes new surveillance activities related to schools, worksites and restaurants, city and county ordinances, and enforcement activities that restrict youth from accessing tobacco products. It also indicates the status of the tobacco use goals in Georgia as they relate to those stated in the Healthy People 2010 Objectives (Table F).

The Georgia Department of Human Resources and the Georgia Cancer Coalition are committed to making this surveillance data available to facilitate program evaluation, evidence-based decision-making and outcomes measurement.

Data from this report will be used by the Georgia Department of Human Resources, the Georgia Cancer Coalition and partner organizations to redesign and enhance strategies implemented for tobacco use prevention in Georgia.

Burden of Tobacco in Georgia

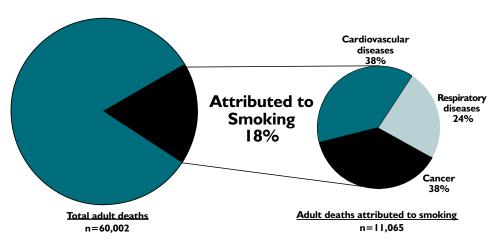
Mortality

Cigarette smoking is a leading cause of preventable illness and death in Georgia. An estimated 11,065 (18 percent) of the 60,002 deaths in 2001 among Georgians 35 years and older were attributed to cigarette smoking; of these estimated deaths, 4,235 (38 percent) were due to cancer, 4,226 (38 percent) were due to cardiovascular disease, and 2,604 (24 percent) were due to respiratory diseases (Figure 1). In 2001, the most common causes of death due to tobacco use in Georgia were lung cancer (3,434 deaths), ischemic heart disease (1,904 deaths), chronic airway obstruction (1,874 deaths), and stroke (564 deaths).

Smoking caused an estimated 6,946 adult male deaths and 4,119 adult female deaths in Georgia in 2001 (Table A).

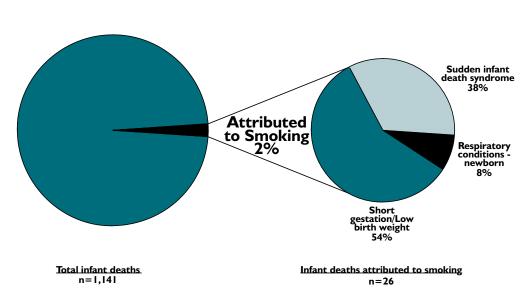
An estimated 26 (2 percent) of the 1,141 infant deaths in 2001 were attributed to smoking (Figure 2). Of all smoking-related infant deaths in Georgia, 54 percent were from short gestation/low birth weight, 38 percent were from sudden infant death syndrome and eight percent were from respiratory conditions of the newborn (Table A).

Figure 1. Deaths among adult Georgians ages 35 years and older, 2001



Sources: Georgia Vital Statistics, 2001; CDC SAMMEC

Figure 2. Deaths among infants one year and younger, Georgia, 2001



Sources: Georgia Vital Statistics, 2001; CDC SAMMEC

¹ The smoking-attributable mortality estimates for each of the public health districts in Georgia are found in Table B of the Appendix.

Burden of Tobacco in Georgia

Table 2. Years of Potential Life Lost (YPLL), number of deaths, and average YPLL attributed to smoking by disease category and sex, Georgia, 2001

	YPLL attributed to smoking	Deaths attributed to smoking	Average YPLL per death from smoking
Disease Category			
Neoplasms Male Female Total Neoplasms	48,573 25,425 73,998	2,893 1,342 4,235	16.8 18.9 17.5
Cardiovascular Diseases Male Female Total Cardiovascular Diseases	46,578 26,178 72,756	2,682 1,544 4,226	17.4 17.0 17.2
Respiratory Diseases Male Female Total Respiratory Diseases	16,973 17,439 34,412	1,371 1,233 2,604	12.4 14.1 13.2
Total Adult (35+ years)	181,166	11,065	16.4*
Perinatal Conditions Male Female Total Perinatal Conditions	1,110 874 1,984	15 11 26	74.0 79.4 76.3 ¶
Overall Total	183,150	11,091	16.5

^{*} Indicates the average years of potential life lost attributed to smoking per adult smoker

Table 3. Annual smoking-attributable economic costs, Georgia, 2001

Cost component	Total
Annual smoking-attributable productivity losses, 2001	
Men	\$1,918,000,000
Women	\$935,000,000
Total	\$2,853,000,000
Smoking-attributable adult healthcare costs, 1998*	
Ambulatory care	\$742,000,000
Hospital care	\$421,000,000
Prescription drugs	\$149,000,000
Nursing home	\$311,000,000
Other care	\$135,000,000
Total	\$1,758,000,000
Total adult (35+ years) costs	\$4,611,000,000
Infant costs	
Smoking-attributable neonatal healthcare costs¶	\$9,000,000
Total costs	\$4,620,000,000

^{*} Expenditure smoking-attributable fractions obtained from Miller, et.al and 1998 personal healthcare expenditure data obtained from Centers for Medicare and Medicaid Services.

Years of Potential Life Lost

Years of potential life lost (YPLL), a calculation used to measure premature mortality, is the sum of the years of life lost annually by all persons who died before their expected age of death. Over 183,000 years of life were lost in Georgia in 2001 due to smoking. Adult male and female smokers lost an average of 16.1 and 16.8 years, respectively, because they smoked. Smokers who died from smoking-attributed cancer lost an average of 17.5 years of potential life; those who died from smokingattributed cardiovascular disease lost an average of 17.2 years; and those who died from smokingattributed respiratory disease lost an average of 13.2 years (Table 2).

Economic Costs

Smoking-related productivity losses in Georgia for 2001 totaled \$2.9 billion and smoking-related healthcare costs reached \$1.8 billion for adults 18 years and older. In addition, \$9 million of infant healthcare costs in Georgia were attributed to smoking annually (Table 3).

[¶] Indicates the average years of potential life loss attributed to smoking per child born of a woman who smoked during pregnancy

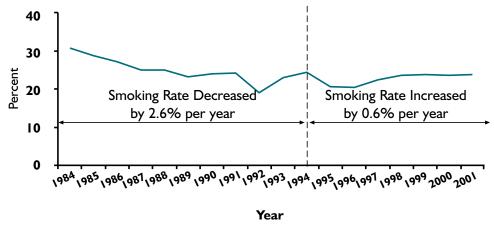
¹ Neonatal expenditures are based on the reimbursement levels used by a sample of private insurers in 1996. Smoking-attributable neonatal expenditures are based on data from 1999 Georgia Birth Certificate and Natality Reports.

Cigarette use among adults

Cigarette use among adult Georgians has been stable for the past decade. From 1985 through 1993 the prevalence of adult smokers declined by an average of 2.6 percent per year. From 1994 through 2001, however, the prevalence did not change significantly, rising by an average of 0.6 percent per year (Figure 3).

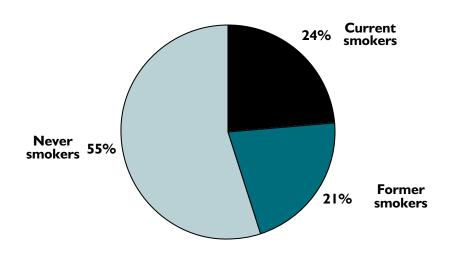
In 2001, 24 percent of adult Georgians 18 years and older were current smokers, 21 percent were former smokers, and 55 percent were never smokers (Figure 4).²

Figure 3. Current smoking among Georgia adults 18+ years, 1984-2001



Source: BRFSS

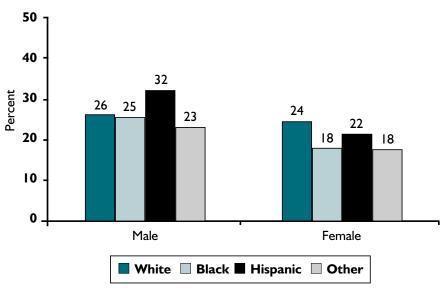
Figure 4. Smoking status among Georgia adults 18+ years, 2001



Source: BRFSS 2001

² The adult smoking prevalence rates for each of the public health districts in Georgia are found in Table C of the Appendix.

Figure 5. Smoking prevalence by sex and race/ethnicity, Georgia adults 18+ years, 2001

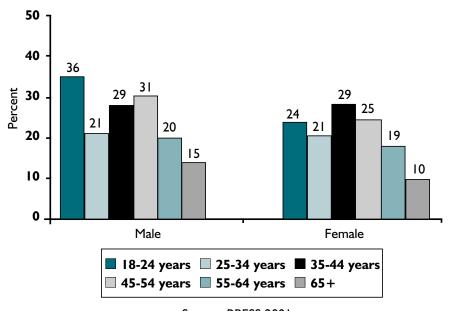


Source: BRFSS 2001

differences in the prevalence of cigarette smoking between males (26 percent) and females (22 percent) or among racial or ethnic groups (non-Hispanic whites, 25 percent; non-Hispanic blacks, 21 percent; Hispanics, 26 percent; and other race/ethnicity, 21 percent). Non-Hispanic white females (24 percent) were significantly more likely than non-Hispanic black females (18 percent) to smoke cigarettes; however, no significant differences were found among males by race (Figure 5).

There were no significant

Figure 6. Smoking prevalence by sex and age, Georgia adults 18+ years, 2001



Source: BRFSS 2001

For both males and females, the prevalence of current smoking in 2001 was significantly higher among the younger age groups than the older age groups (Figure 6).

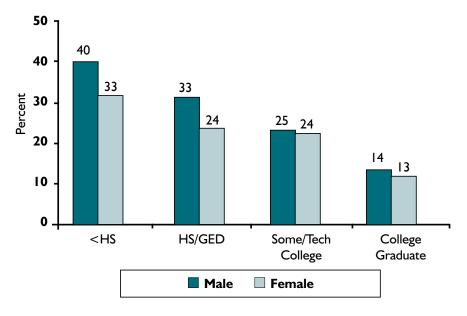
Adults with less than a high school education were significantly more likely than those with a high school education or above to smoke cigarettes (Figure 7). A sex-specific trend analysis indicates that the smoking rates among college graduates have decreased since 1984, whereas the smoking rates among groups with fewer years of education have not changed significantly.

Cigarette use among pregnant women

Smoking during pregnancy is associated with an increased risk for premature rupture of membranes, spontaneous abortion or miscarriage, hemorrhaging during delivery, and preterm delivery. The longer the mother smokes throughout pregnancy, the lower the birth weight of the newborn and the greater the risk of being premature, developing sudden infant death syndrome, and having respiratory illnesses (8).

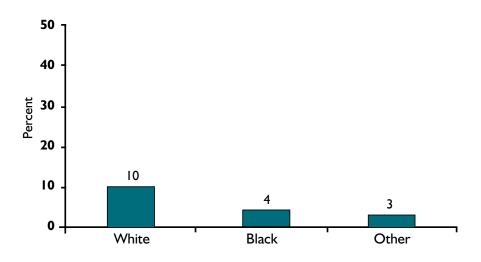
In 2001, eight percent of pregnant women in Georgia smoked throughout their pregnancy. The prevalence of smoking during pregnancy was higher for non-Hispanic whites (10 percent) than for non-Hispanic blacks (four percent) (Figure 8). On average, the number of cigarettes smoked per day was 10 for non-Hispanic white pregnant women who smoked and six for non-Hispanic black pregnant women who smoked.

Figure 7. Smoking prevalence by education and sex, Georgia adults 18+ years, 2001



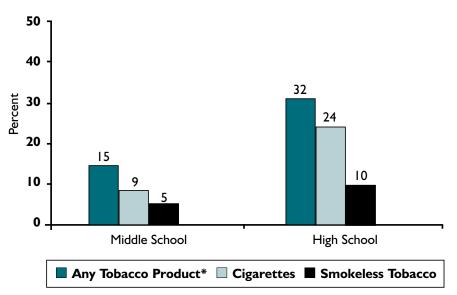
Source: BRFSS 2001

Figure 8. Smoking during pregnancy by race, Georgia, 2001



Source: Georgia Vital Statistics, 2001

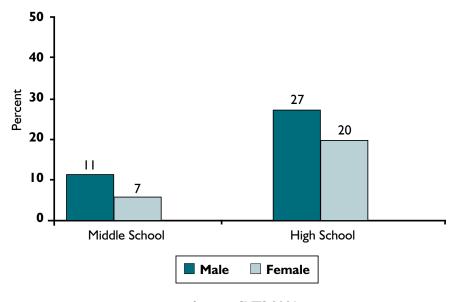
Figure 9. Tobacco use by school type and tobacco product, Georgia, 2001



^{*}Because this variable includes use of cigarettes, cigars, smokeless tobacco, pipe, or bidis, the rate represented is not the result of adding the rates of cigarette and smokeless tobacco use.

Source: GYTS 2001

Figure 10. Smoking prevalence by school type and sex, Georgia, 2001



Source: GYTS 2001

Tobacco use among youth

In Georgia, 15 percent of middle school students and 32 percent of high school students used some form of tobacco in 2001; nine percent of middle school students and 24 percent of high school students smoked cigarettes, while five percent of middle school students and 10 percent of high school students used smokeless tobacco (Figure 9).³

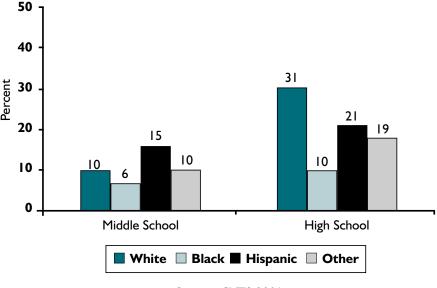
Middle school male and female students smoked at comparable rates. However, high school males had a significantly higher prevalence of smoking than high school females (Figure 10).

The youth smoking prevalence for participating public health districts in Georgia are found in Table D of the Appendix.

Non-Hispanic black students in middle and high school were less likely than non-Hispanic white and Hispanic students to smoke cigarettes (Figure 11). Among students who ever smoked, nearly one in four (27 percent) middle school and one in seven (15 percent) high school students smoked a whole cigarette before age 11.

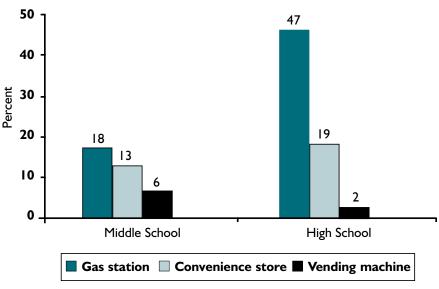
Gas stations and convenience stores were the places where about one third of middle school and two thirds of high school students made their most recent cigarette purchase (Figure 12). Choice of place for purchasing cigarettes did not differ by sex or by race/ethnicity.

Figure 11. Smoking prevalence by school type and race/ethnicity, Georgia, 2001



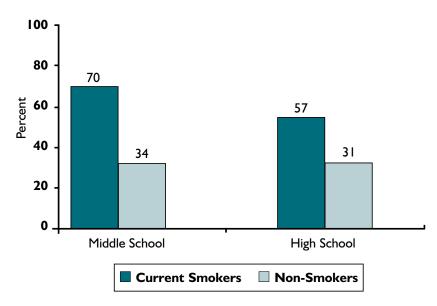
Source: GYTS 2001

Figure 12. Place of purchase of cigarettes by school type and place, Georgia, 2001



Source: GYTS 2001

Figure 13. Percentage of students living with smoker by school type and smoking status, Georgia, 2001



Source: GYTS 2001



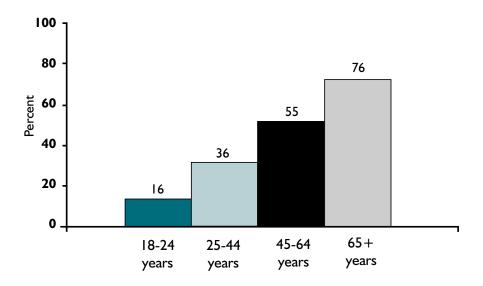
Nearly three-fourths of middle school smokers (70 percent) and over half of high school smokers (57 percent) lived with a smoker. About one-third of middle school non-smokers (34 percent) and high school non-smokers (31 percent) lived with a smoker (Figure 13).

Reducing Tobacco Use in Georgia

Former smokers

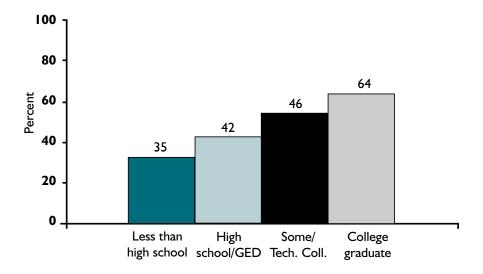
The quit ratio, defined as the proportion of former smokers in a given population divided by the proportion of ever smokers in that same population, is used as an indicator of quitting behavior among people who have ever smoked. In Georgia, the percentage of ever smokers who have quit has been increasing, rising from 38 percent in 1985 to 47 percent in 2001. Adults 45 years and older and adults with more than high school education had a higher quit ratio than younger adults and those with fewer years of education, respectively (Figures 14 and 15).

Figure 14. Percentage of former smokers among ever smokers by age, Georgia adults 18+ years, 2001



Source: BRFSS 2001

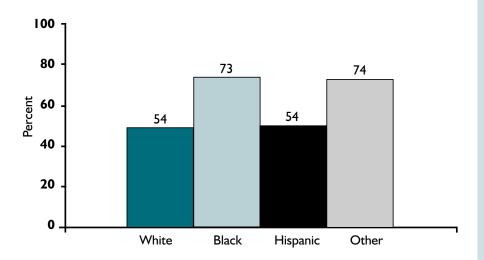
Figure 15. Percentage of former smokers among ever smokers by education, Georgia adults 18+ years, 2001



Source: BRFSS 2001

Reducing Tobacco Use in Georgia

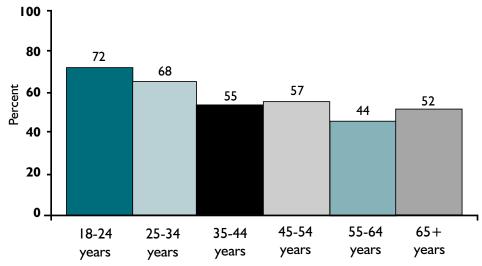
Figure 16. Percentage of current smokers who quit* for ≥ 1 day in past year by race/ethnicity, Georgia adults 18+ years, 2001



*BRFSS Question: During the past 12 months, have you stopped smoking for one day or longer because you were trying to quit smoking?

Source: BRFSS 2001

Figure 17. Percentage of current smokers who quit* for \geq 1 day in past year by age, Georgia adults 18+ years, 2001



* BRFSS Question: During the past 12 months, have you stopped smoking for one day or longer because you were trying to quit smoking?

Source: BRFSS 2001

Smoking cessation

More than half of adult Georgian smokers (59 percent) reported having stopped smoking for one day or longer during the past 12 months because they were trying to quit smoking. There were no statistically significant differences in the prevalence of male and female smokers who had quit for one day or longer (60 percent vs. 59 percent, respectively). Non-Hispanic black smokers had a significantly higher prevalence of quitting for one day or longer (73 percent) than non-Hispanic white smokers (54 percent) (Figure 16).

Current smokers between the ages of 18 and 24 stopped smoking for one day or longer at a significantly higher rate (72 percent) than those between 35 and 44 years of age (55 percent) and those between 55 and 64 years of age (44 percent) (Figure 17).

Reducing Tobacco Use in Georgia

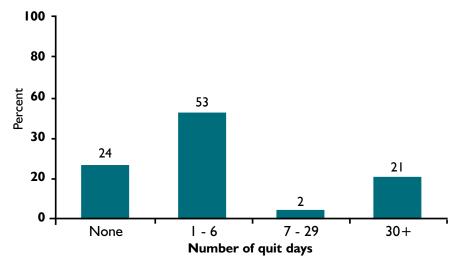
Georgia Tobacco Quit Line Survey

The Georgia Tobacco Quit Line (GAQL) is a statewide, toll-free, telephone-based resource that provides stage-appropriate screening, written materials, tobacco cessation counseling, and referrals for follow-up assistance, based on an individual's readiness to quit. The GAQL began providing services in November 2001 and received more than 16,000 calls for assistance during its first year.

A Quit Status Survey was conducted in 2002 among a sample of 508 GAQL callers to assess the number of quit attempts they had made since their last cessation counseling session and to determine their abstinence rates. Results indicate that at the time of the survey, 76 percent had made at least one attempt to quit smoking (Figure 18). Twenty-one percent had not used tobacco for 30 days or more.

Among the respondents who made at least one quit attempt, 84 percent reported using more than one quit method. Many used some form of pharmacotherapy; one in four (26 percent) used nicotine patches, one in six (15 percent) used nicotine gum, and one in eight (12 percent) used Zyban®. Many made changes to their consumption patterns, such as reducing their tobacco use (82 percent) or switching to a brand with lower nicotine content (33 percent). More than half (62 percent) had tried to quit "cold turkey." Few (eight percent) joined a cessation program (Table 4).

Figure 18. Percentage of callers to quit line who had not used tobacco by number of quit days, Georgia, 2002



Source: Group Health Cooperative, 2002

Table 4. Cessation strategies used after calling the Georgia Quit Line, 2002

	N (386)	%
Used pharmacotherapy		
Nicotine patch		
Yes	102	26.4
No	274	71.0
Refused patches/ had medical contraindications	10	2.6
Nicotine gum		
Yes	56	14.5
No	323	83.7
Refused gum use/ had medical contraindications	7	1.8
Zyban ®		
Yes	48	12.4
No	325	84.2
Refused Zyban $^{\circ}$ / had medical contraindications	13	3.4
Used behavior modification		
Fading (Switching brands)		
Yes	128	33.2
No	256	66.3
Don't know	2	0.5
Tapering (Cutting down on tobacco use)		
Yes	316	81.9
No	70	18.1
Tried to quit without assistance ("cold turkey")		
Yes	241	62.4
No	144	37.3
Joined a program to help with the quit process		
Yes	32	8.3
No	354	91.7

Among the 386 respondents who made serious quit attempts, 84.1% reported more than one quit method. Source: Group Health Cooperative Center for Health Promotion.

Table 5. Schools with policies prohibiting the use of tobacco products by type of product, Georgia, 2002

	Banned Products							
	Cigarettes %	Smokeless Tobacco %	Cigars %	Pipes %				
Middle School								
Students School staff Visitors	98.8 92.1 88.6	98.8 92.1 85.1	98.8 92.8 88.6	98.8 92.8 88.6				
High School								
Students School staff Visitors	99.2 93.9 88.0	98.4 93.8 88.0	98.4 93.0 87.2	99.2 93.0 87.2				

Source: School Health Education Profile. 2002.

Table 6. Schools with policies prohibiting the use of tobacco products by school environment, Georgia, 2002

	Restricted Areas										
	School buildings %	buildings grounds events hours									
Middle School											
Students School staff Visitors	99.4 98.8 94.3	99.4 93.0 84.4	99.4 96.0 65.9	99.3 93.8 91.2	86.4 76.5 74.6						
High School											
Students School staff Visitors	100.0 98.0 95.5	100.0 91.5 79.6	97.6 84.8 52.6	100.0 93.0 86.4	84.1 70.4 57.2						

Source: School Health Education Profile, 2002.

Policies or environments that restrict or prohibit smoking prevent some people from starting to smoke, help current smokers quit, and reduce exposure to environmental tobacco smoke. Surveillance activities focusing on policy and environment, such as the School Health Education Profile, the Georgia Worksite Health Promotion Policies and Practices Survey, the Restaurant Survey, and the Local Tobacco Ordinance Tracking Survey, have taken place in Georgia since 2001 to assess the presence of policies and environments that prevent or reduce tobacco use among Georgians.

School Health Education Profile

The School Health Education Profile (SHEP) was conducted in the spring of 2002 to assess existing school health policies and programs in public middle and high schools in Georgia.

Findings from SHEP indicate that a vast majority of public schools in Georgia (98 percent) have adopted policies prohibiting tobacco use (i.e., cigarettes, smokeless tobacco, cigars, and pipes) (Table 5). These policies are valid in school buildings, grounds, and at school events and apply to students, school staff, and visitors during both school and after-school hours (Table 6).

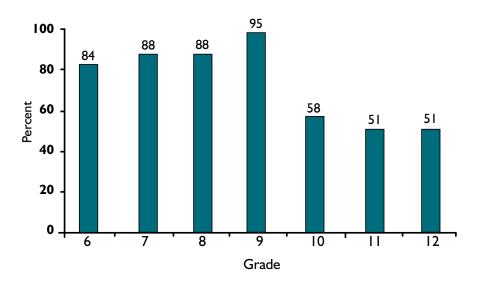
Although almost all schools have policies, only about half of middle (56 percent) and high (55 percent) schools had a designated school employee responsible for enforcing existing tobacco use prevention policies.

Tobacco use prevention courses were more common in grades 6 through 9 (84 percent to 95 percent) than in grades 10 through 12 (51 percent to 58 percent) (Figure 19).

Georgia Worksite Health Promotion Policies and Practices Survey

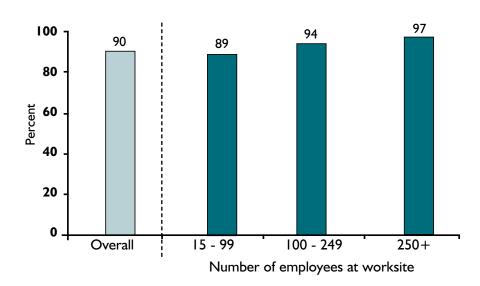
The Georgia Worksite Health **Promotion Policies and Practices** Survey was designed to assess existing worksite policies and environments affecting the health of Georgia workers. In 2002, 90 percent of Georgia worksites had a formal policy prohibiting smoking on the job. Worksites with 250 or more employees were significantly more likely than those with 15 to 99 employees to have formal policies (97 percent vs. 89 percent, respectively) (Figure 20). Only eight percent of Georgia worksites offered smoking cessation programs and two percent had cigarette vending machines on site.

Figure 19. Percentage of schools that teach tobacco use prevention courses by grade, Georgia, 2002



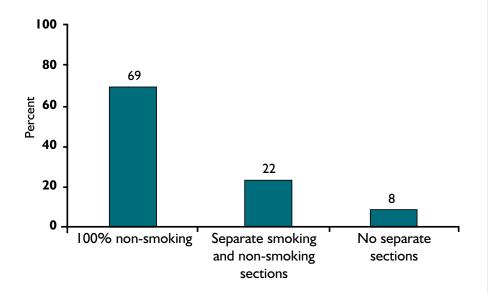
Source: School Health Education Profile, Georgia 2002

Figure 20. Percentage of worksites with formal tobacco policy by number of employees, Georgia, 2002



Source: Georgia Worksite Health Promotion Policies and Practices Survey, 2002

Figure 21. Smoking provisions in food service establishments, Southeast Health District, Georgia, 2001



Source: MMWR 2003

Table 7. Jurisdictions with tobacco-related ordinances by jurisdiction type, Georgia, 2001

		Jurisdictions in su	participating rvey	Jurisdictions with ≥ tobacco ordinance		
Jurisdiction Type	Total Jurisdictions in Georgia	N	%	N	%	
County Incorporated city	159 532	159 466	100 88	61 67	38 14	
Total	691	625	90	128	20	

Source: Georgia Local Tobacco Ordinance Tracking Survey, 2001

Restaurant Survey

In March 2001, the Southeast Health District (Waycross) conducted a survey to assess smoking provisions, such as designated smoking areas and ventilation systems, in food service establishments (9). Of 928 food service establishments in the district, 729 (79 percent) were surveyed; of these, 69 percent were completely smoke-free, 22 percent had separate smoking and non-smoking areas, and less than ten percent did not have separate smoking and non-smoking areas (Figure 21).

Local Tobacco Ordinance Tracking Survey

The Local Tobacco Ordinance Tracking Survey was conducted in 2002-2003. It was designed to determine the existence of ordinances pertaining to the use of tobacco products in counties and cities throughout the state.

In 2001, 38 percent of county governments and 14 percent of city governments in Georgia have tobacco-related ordinances (Table 7). An ordinance may cover one or more topics, such as government property, indoor recreation areas, and licensure. The ordinances vary widely in scope, ranging from simple proscriptions against smoking in city hall with no specific penalties attached to comprehensive ordinances covering a range of public and private locations.

Enforcement

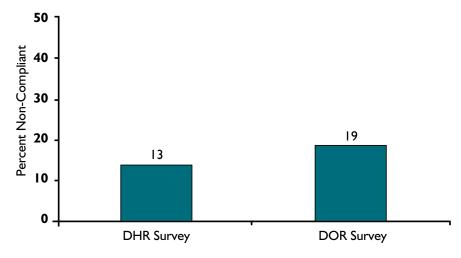
It is against Georgia law to sell tobacco to individuals younger than 18 years of age (Georgia Law 16-12-171). Establishments violating the law are subject to a citation with a standard \$500.00 fine for the first violation. The licensees are put on notice that any additional violations will result in additional citations, suspension and revocation of their tobacco license.

Surveys conducted by the Division of Mental Health, Developmental Disabilities, and Addictive Diseases of the Georgia Department of Human Resources and by the Alcohol and Tobacco Division of the Georgia Department of Revenue estimated non-compliance with the law at 13 percent and 19 percent, respectively (Figure 22).

Taxation

Research has shown that higher cigarette prices are associated with lower overall cigarette consumption among both adults and youth (10, 11, 12). Most studies indicate that a 10 percent increase in price reduces overall cigarette consumption by three percent to five percent. Youth, minorities, and lower income smokers are two to three times more likely to quit or to smoke less than other smokers due to an increase in the price of cigarettes. The Surgeon General's report on tobacco use reduction concluded that raising tobacco taxes is one of the most effective strategies for tobacco prevention and control (13).

Figure 22. Percentage of retailers that sell tobacco to persons younger than 18 years, Georgia, 2001



Sources: Georgia Dept. of Human Resources, Division of Mental Health, Developmental Disabilities, and Addictive Diseases; Georgia Dept. of Revenue, Alcohol and Tobacco Division

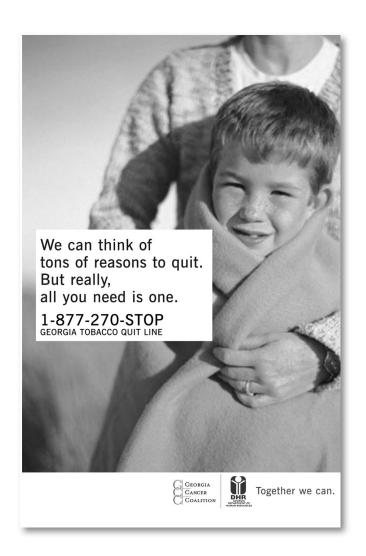
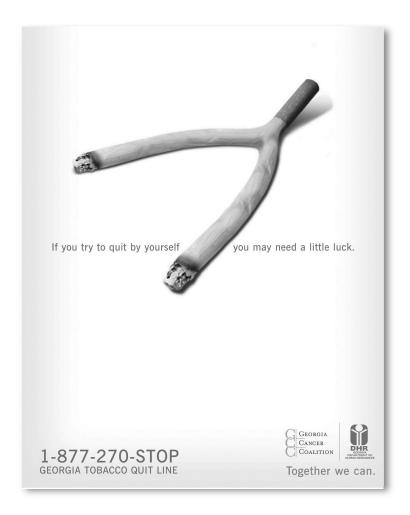


Table 8. Excise taxes on cigarettes, cigars, and smokeless tobacco, United States and Georgia, 2002-2003

Product	US, 12/31/02	GA, 12/31/02	GA, 7/1/03
Per pack of cigarettes	All states have a tax Range: \$0.025 - \$1.51 Average: \$0.60	\$0.12	\$0.37
Cigars	16 states with tax Range: \$0.015/10 cigars - 129.42% wholesale price Average: N/A	13% of wholesale price	23% of wholesale price
Smokeless tobacco	45 states with tax Range: \$0.008/ounce - 129.42% whole- sale price Average: N/A	No	10% of wholesale price

Sixteen states have dedicated a percent of tobacco taxes to cancer or tobacco control. Georgia has not adopted this law.

Source: National Cancer Institute, State Cancer Legislative Database Program, April 2003



All 50 states and the District of Columbia impose excise taxes on cigarettes, which, as of December 31, 2002, ranged from 2.5 cents to \$1.51 per pack and averaged at 60 cents per pack nationally (14). A portion of the cigarette excise tax revenue is dedicated to cancer or tobacco control programs by law in 16 states. In addition, 45 states impose excise taxes on chewing tobacco and snuff (smokeless tobacco) (Table 8).

Prior to July 1, 2003, the excise tax on cigarette sales in Georgia was 12 cents per pack and the excise tax on cigars was 13 percent of a wholesaler's cost. There was no excise tax on smokeless tobacco or snuff and no portion of excise taxes on tobacco products was specifically dedicated to tobacco use prevention or control activities (14). Georgia's net revenue collections from tobacco taxes in 2002 totaled \$86 million, compared to \$87 million and \$88 million in 2001 and 2000, respectively (15).

As of July 1, 2003, the excise tax on cigarette sales in Georgia increased to 37 cents per pack, the excise tax on cigars increased to 23 percent of a wholesaler's cost, and for the first time there is an excise tax on smokeless tobacco and snuff at 10 percent of a wholesaler's cost (Table 8).

Summary and Conclusions

Data from the surveillance systems described in this report provide information about the burden and prevention of tobacco-related illness in Georgia. The major findings include:



Over 11,000 adult Georgians die every year from tobacco-related illnesses, about one death out of every six. Of these deaths, 38 percent are due to cancer, 38 percent to heart disease, and 24 percent to respiratory illness.

Implications for prevention:

The burden of tobacco-related illness in Georgia is high. More widespread application of complementary proven prevention programs could reduce the burden.



About 26 infants die every year in Georgia because their mothers smoked during pregnancy.

Implications for prevention:

- Smoking cessation programs for pregnant women have shown to be cost effective and to double the rates for quitting, thus reducing the prevalence of smoking during pregnancy (8).
- Although many women voluntarily quit smoking during pregnancy, about two-thirds of them are smoking again a year after delivery. Smoking cessation and prevention efforts tailored to these women should resume post partum (16, 17).



The costs of tobacco-related adult deaths and illnesses are \$1.8 billion in health care costs and \$2.9 billion in lost productivity annually in Georgia.

Implications for prevention:

Reducing tobacco use in Georgia would save money for individuals, businesses, and government.



One out of four (24 percent) adult Georgians smokes cigarettes. This percent has not changed since 1993. People in younger age groups and people with fewer years of education are more likely to smoke than older persons or persons with more years of education.

Implications for prevention:

- Although smoking is prevalent among all segments of society, some groups are more likely to smoke than others. Smoking cessation and prevention activities should include efforts targeting groups in which smoking is most prevalent, namely, younger people and people with fewer years of education.
- Youth and lower income smokers are more likely to quit or smoke less than other smokers because of an increase in the cost of cigarettes. A 10 percent

increase in the cost of cigarettes reduces consumption of cigarettes by 3-5 percent (13).



9 percent of middle school and 24 percent of high school students in Georgia smoke cigarettes. Although they obtain their cigarettes in a variety of ways, the most common places of purchase are gas stations and convenience stores.

Implications for prevention:

- School-based smoking prevention policies and education have helped reduce the prevalence of smoking among middle and high school students by half within a decade (18).
- Strict enforcement of laws and regulations that prohibit the sale of tobacco products to individuals younger than 18 years of age has been shown to hinder youth purchases of tobacco, which may reduce the youth smoking prevalence (19).



More than half (59 percent) of current adult smokers tried to quit in the past year, with younger smokers more likely than older smokers to stop for one day or longer.

Implications for prevention:

- o Raising the cost of tobacco products is helpful to many smokers who are trying to stop smoking (13). Low-income smokers may be more likely than high-income smokers to benefit from a higher cost of tobacco.
- Promoting use of the quit line, combined with health education interventions or clinical assistance, helps smokers quit (20). One out of every five smokers who used the Georgia Quit Line and were contacted about their current smoking had not smoked for at least 30 days.



Most public schools (98 percent) and worksites (90 percent) in Georgia have policies limiting or prohibiting tobacco use on the premises; 38 percent of counties and 14 percent of city governments have ordinances related to tobacco use.

Implications for prevention:

County and city governments should be encouraged to establish smoking regulations within their borders. Smoking restrictions in public places (e.g., restaurants) help smokers stop or reduce smoking (13). Establishments in cities where smoking restrictions in restaurants and bars have been enacted have not been financially hurt (21).

This report compiles tobacco-related information from different available data sources in Georgia.

Mortality Data

Mortality data in Georgia were provided by the Office of Health Information and Policy, Georgia Division of Public Health. Deaths for 22 conditions that are related to smoking were counted and categorized using the ICD-10 codes listed in Appendix tables A and B.

Smoking-Attributable Mortality Estimates

The Smoking Attributable Morbidity, Mortality, and Economic Costs (SAMMEC) application developed by the Centers for Disease Control and Prevention (CDC) derives smoking-attributable mortality (SAM) using an attributable-fraction formula (24). The smoking-attributable fractions (SAF) of adult deaths for 18 smoking-related diseases are calculated using sex-specific smoking prevalence and relative risk (RR) of death for adult current and former smokers aged \geq 35. Infant mortality SAFs are calculated using maternal smoking prevalence and RR of death for four infant conditions caused by smoking. SAFs for each disease and sex are derived using the following formula:

$$SAF = [(p0 + pI(RRI) + p2(RR2)) - I] / [p0 + pI(RRI) + p2(RR2)]$$

For adults:

p0 = Percentage of adult never smokers in study group

p I = Percentage of adult current smokers in study group

p2 = Percentage of adult former smokers in study group

RRI = Relative risk of death for adult current smokers relative to adult never smokers

RR2 = Relative risk of death for adult former smokers relative to adult never smokers

For infants:

p0 = Percentage of maternal non-smokers in study group

p I = Percentage of maternal smokers in study group

p2 = Not applicable

RRI = Relative risk of death for infants of maternal smokers relative to infants of maternal nonsmokers

RR2 = Not applicable

Data for former smokers are not included in the SAF for infants because it calculates the impact of maternal smoking during pregnancy.

Prevalence Data

SAMMEC uses separate prevalence data for adult smokers aged 35-64 and \geq 65 years. The adult smoking prevalence estimates for 2001 were obtained from the Georgia Behavioral Risk Factor Surveillance System (BRFSS). The maternal smoking prevalence for 2000 was obtained from Georgia Vital Statistics as noted on birth certificates.

Relative Risk Data

SAMMEC uses age-adjusted RR estimates for adults aged \geq 35 years from the second wave of the American Cancer Society's Cancer Prevention Study (CPS-II) six year follow-up. Separate RR data are used for smokers aged 35-64 and \geq 65 years for ischemic (or coronary) heart disease and cerebrovascular disease (stroke). The RR of death from smoking drops dramatically after age 65 for these two conditions.

SAMMEC also uses infant RR estimates for short gestation/low birth weight, Sudden Infant Death Syndrome (SIDS), Respiratory Distress Syndrome (RDS), and other infant conditions of the newborn from a meta analysis of epidemiological literature conducted by Gavin et al. (2001).

Estimation of Smoking-Attributable Mortality

SAMMEC applies the age- and sex-specific adult SAFs to adult mortality data for each smoking-related disease in the population under study. Mortality data by cause of death in Georgia for 2001 were obtained from Georgia Vital Statistics. The number of deaths is multiplied by the relevant SAF for each smoking-related cause of death.

SAMMEC applies the infant SAF to infant mortality data derived from Georgia Vital Statistics' infant birth and death records. The following formula is used to calculate the SAM:

SAM = Number of deaths x SAF

Summing across age categories provides the sex-specific estimate of SAM for each cause of death. Total SAM is the sum of smoking-attributable deaths across age groups, and across causes of death for both sexes combined.

Estimation of Years of Potential Life Lost

SAMMEC estimates the total impact of premature deaths on the life expectancy of adult smokers and infants of maternal smokers. Smoking-attributable years of potential life lost (YPLL) are the sum of years of life lost from premature deaths caused by smoking.

SAMMEC multiplies the number of smoking-attributable adult deaths by the midpoint estimate of remaining life expectancy (RLE) for each smoking-related cause of death, sex, and 5-year age group, while for infants it uses the RLE at birth for both sexes to calculate adult and infant YPLL through the following formula:

Smoking-attributable YPLL = $SAM \times RLE$

Age- and sex-specific remaining life expectancy data for the nation for 2000 were obtained from National Center for Health Statistics (25). Total YPLL estimates are generated for each disease, major disease category, and all diseases combined, by sex and both sexes combined.

Estimation of Average Years of Potential Life Lost

The average smoking-attributable YPLL per smoker was calculated using the following formula:

Average smoking-attributable YPLL per smoker = <u>smoking-attributable YPLL due to a cause of death</u>

SAM due to a cause of death

Medical Expenditures

The SAMMEC application can be used to estimate the medical costs of smoking based on econometric methods. Smoking-attributable medical expenditures (SAE) are the excess personal health care costs of smokers and former smokers compared to never smokers.

SAMMEC includes pre-calculated national and state-level expenditure data for adults aged 18 years and over. The pre-calculated estimates include:

- 1998 total personal health care expenditures
- smoking-attributable fraction (SAF) of expenditures
- 1998 smoking-attributable medical expenditures (SAE)

Total personal health care expenditures were obtained from the state health care expenditure files provided by the Centers for Medicare and Medicaid Services (CMS). SAMMEC provides estimates for each of five adult expenditure categories: ambulatory care, hospital care, prescription drugs, nursing home care, and other care (including home health, nonprescription drugs and nondurable medical products). Mental health care, dental care, and vision care products are not included.

The smoking-attributable fraction (SAF) of expenditures reflects the proportion of annual personal health care expenditures that could be avoided if smoking were eliminated from the population. SAMMEC uses expenditure SAFs from Miller et al. (1999) for each of the five expenditure categories.

Miller et al. calculated expenditure SAFs for ambulatory care, hospital care, prescription drug, and other care (including home health care, vision care, and durable and nondurable medical equipment), by estimating models that alternatively included and excluded the influence of smoking history on expenditures. Expenditures were estimated using a two-step econometric model, used to account for the large proportion of individuals who have no medical expenditures in any given year.

To calculate SAF, two sets of estimates were calculated for each expenditure category. The first set of estimates included all individuals, including smokers. The second set of estimates was calculated after setting the smoking history variables to zero and holding all other factors constant. This generated expenditure estimates as if smoking were eliminated from the study population. SAFs were derived by dividing the difference in the expenditure estimates by the expenditures that included smoking history.

Mortality-Related Productivity Costs

Mortality-related productivity costs are the estimated costs of lost future earnings from paid market and unpaid house-hold labor resulting from premature death due to smoking-related disease. Estimates of the present value of lifetime future earnings (PVFE) are based on the human capital methodology, which assumes average earnings reflect the contribution workers make to the value of goods and services. As the economic analog of the YPLL measure, the mortality-related productivity costs estimates incorporate both the number of deaths and number of premature deaths due to smoking-related causes. Rather than assessing this loss of life in terms of person-years, SAM data are translated into future earnings losses (including the value of unpaid household work).

For each smoking-attributable death, by sex and 5-year age group, the number of deaths is multiplied by the corresponding PVFE value:

Smoking-attributable productivity costs = $SAM \times PVFE$

Summing across age categories provides the sex-specific estimate of smoking-attributable lifetime earnings losses (productivity costs) for each cause of death. Total smoking-attributable productivity costs are generated for each disease, disease category, and all diseases, for each sex and both sexes combined.

Smoking-attributable Death Estimates at the Health District Level

Proportions were used to calculate estimates of smoking-attributable deaths for each health district. Presuming that each district's risk of dying from tobacco use was similar to the state's risk, the smoking-attributable deaths for each disease category were divided by the total number of deaths for each disease category and this resulting rate was in turn multiplied times the district's total number of deaths for each disease category:

District SAM = <u>State SAM for each disease category</u> X District deaths for each disease category

State deaths for each disease category

Calculation of the Quit Ratio

The quit ratio was calculated to obtain the percent of former adult smokers using the following formula:

Quit ratio = Former smoker x 100

Ever smokers

Behavioral Risk Factor Surveillance System

The Georgia Behavioral Risk Factor Surveillance System (BRFSS) data were analyzed to obtain the smoking prevalence and quit ratios among adult Georgians. The BRFSS is a survey conducted annually by the Division of Public Health of the Georgia Department of Human Resources. The survey is administered by telephone to the non-institutionalized, civilian population aged 18 years and older in Georgia using standardized methods and questionnaires. The BRFSS covers a wide range of modifiable health behaviors related primarily to chronic diseases, including high blood pressure, obesity, binge drinking, and cigarette smoking. Data have been collected in Georgia annually since 1984.

In 2001, a total of 4,532 adult Georgians were included in the survey. All estimates presented in this report are based on the 2001 survey except for the analysis of time trends, which uses data from 1984 through 2001.

Youth Tobacco Survey

Data on tobacco use among youth were obtained from the 2001 Georgia Youth Tobacco Survey, a school-based survey administered to a representative sample of middle and high school students in the state (22). The survey provides comprehensive data on tobacco use, exposure to environmental tobacco smoke, smoking cessation, minors' ability to purchase or obtain tobacco products, knowledge and attitudes about tobacco, and familiarity with media messages.

Georgia Tobacco Quit Line

Data on the cessation status among users of the Georgia tobacco quit line were obtained from a cessation status survey conducted by Group Health Cooperative on behalf of Georgia's tobacco use prevention program (23). Findings indicate the effectiveness of the services provided by the quit line in its first year of implementation.

School Health Education Profile

The School Health Education Profile (SHEP) was administered to principals and lead health education teachers of a representative sample of 374 randomly selected public middle and high schools in Georgia (26). Survey topics included health education requirements, health education coordination, physical education and physical activity programs, tobacco prevention policies, nutrition-related policies and practices, violence prevention, asthma management, and HIV

prevention programs and policies. The response rates were 71% for principals (n=266) and 70% for lead health education teachers (n=260).

The questionnaires answered by principals assessed school policies prohibiting tobacco use, advertising, sponsorship of school events, actions taken when students are caught smoking, and school referrals to cessation programs for students, faculty, and staff. The teacher questionnaire indicated which topics are covered in the school's health education curriculum and the grades at which those topics are taught.

The Georgia Worksite Health Promotion Policies and Practices Survey

The Georgia Worksite Health Promotion Policies and Practices Survey, a computer-assisted telephone interview modeled after the 1999 National Worksite Health Promotion Survey, was administered to a stratified random sample of worksites in Georgia (27). A total of 1,085 interviews were completed. The data were weighted so that each stratum represented its true proportion in the worksite population.

Restaurant Survey

The survey conducted in the Southeast Health District of Georgia was developed to determine the status of smoking allowed on restaurant premises and the existence of provisions that minimize exposure to secondhand smoke. Provisions included signage designating smoking and non-smoking sections, non-adjacent smoking and non-smoking sections, physical barriers between sections, separate ventilation systems for each section, and the exclusion of common-use areas from the smoking sections (9).

A total of 729 restaurants met study criteria of having indoor seating for patrons. District sanitarians completed the survey by observing a restaurant's existing physical provisions to minimize secondhand smoke and conducted their routine food safety inspections simultaneously.

Local Tobacco Ordinance Tracking Survey

Georgia law (O.C.G.A. §36-80-19; passed in 2000 and amended in 2001) requires that counties and municipalities make their codes available to the public. Not all governments had listed their codes in the State of Georgia Law Library, the county law library, or on city and county websites. The majority of local governments had to be contacted directly by mail in July of 2002 with a letter requesting a copy of their entire code of ordinances, from which all tobacco-related ordinances would be identified after being received. A follow-up postcard was mailed two weeks later. Governments that had not replied were contacted by telephone the following month and until March of 2003 to obtain tobacco-related ordinances.

Georgia is home to 159 counties and 532 incorporated cities. All county governments, 366 municipal governments with populations over 500 residents, and an additional 100 cities with populations under 500 people were accounted for, thus representing over 95 percent of the population of the state. For purposes of this survey, the unit of analysis is the jurisdiction, not the ordinance. A jurisdiction may have one or multiple ordinances relating to tobacco.

Enforcement

Findings of the inspections conducted by the Addictive Diseases Section, as required by the Synar Amendment, were provided by the Division of Mental Health, Developmental Disabilities and Addictive Diseases of the Georgia Department of Human Resources.

A stratified proportional two-stage random sampling design was used to select the sample for the 2001 Georgia Annual Synar Report. The geographical unit for the first-stage sampling frame was the county and outlets within a county made up the second stage. Outlet density was used as a stratification variable. All businesses that sell either consumer products

or services, including tobacco products were included in the sampling frame. These were categorized by business type and divided into those that sell tobacco as over-the-counter vendors and those that sell tobacco in vending machines. Outlets that require identification or membership were not considered in the sampling frame because they were not accessible to youth. The sampling frame for over-the-counter vendors totaled 12,770 and 1,862 for vending machines. The random selection of outlets yielded a sample size of 800 over-the-counter outlets and 150 vending machine vendors.

Findings of the inspections conducted by the Department of Revenue were provided by the Division of Alcohol and Tobacco.

Limitations

The methodology used to calculate the smoking-attributable deaths is subject to several limitations. I) The smoking-attributable mortality figures in this report were estimated by using smoking prevalence and mortality data for 2001, whereas actual smoking-attributable deaths are the result of cumulative exposure to tobacco at higher rates from previous decades. 2) Relative risks were adjusted for the effects of age but not for other potential confounders, although studies have shown that these confounders have little impact on the relative risk of death from smoking. 3) Mortality estimates do not include deaths from smoking cigars or pipes, from using smokeless tobacco, or from environmental tobacco (second-hand) smoke. 4) Smoking-attributable expenditures were derived by applying 1993 smoking-attributable fractions of expenditures to 1998 personal health care expenditure data. Changes in the health care system, economic and demographic characteristics, and risk behaviors between 1993 and 1998 may have influenced the smoking-attributable fractions. 5) Productivity loss estimates do not include the value of lost work time from smoking-related illness, absenteeism, excess work breaks, and secondhand smoke-related disease morbidity and mortality. 6) The medical costs of maternal smoking may be underestimated because the future medical costs of children born to women who smoked during pregnancy and the costs of treating conditions related to secondhand smoke are not taken into account. 7) SAMMEC does not yet calculate smoking-attributed morbidity estimates.

Glossary

Aortic aneurysm: a bulge in the wall of the aorta (a large blood vessel that carries blood from the heart to the rest of the body) that has become stretched out and thin, and in which blood clots may form.

Asthma: a chronic inflammatory disorder of the airways characterized by periodic attacks of wheezing, shortness of breath, chest tightness, and coughing.

Atherosclerosis: thickening and hardening of artery walls.

Bronchitis: a form of chronic obstructive pulmonary disease characterized by persistent cough that brings up mucus from the lungs.

Cancer: a group of diseases characterized by uncontrolled growth and spread of abnormal cells that can result in death.

Cardiovascular disease: includes a wide variety of diseases of the heart and blood vessels, such as ischemic heart disease, stroke, congestive heart failure, hypertensive disease, and atherosclerosis.

Current adult smokers: adults who have smoked at least 100 cigarettes in their lifetime and now smoke every day or some days.

Current youth smokers: middle and high school students who have smoked cigarettes on one or more days in the 30 days preceding the survey.

Emphysema: a form of chronic obstructive pulmonary disease characterized by irreversible damage to the air sacs in the lungs. The air sacs are unable to completely deflate and are therefore unable to fill with fresh air to ensure adequate oxygen supply to the body.

Environmental tobacco smoke (ETS): tobacco smoke that is generated from the burning end of a cigarette, pipe or cigar and the smoke that is exhaled by smokers of these tobacco products. ETS is also known as second-hand smoke.

Ever smokers, adults: adults who have smoked 100 cigarettes in their lifetime.

Ever smokers, youth: middle and high school students who have ever smoked at least one cigarette every day for 30 days.

Former adult smokers: adults who have smoked 100 or more cigarettes in their lifetime but who do not currently smoke.

Hypertension: also known as high blood pressure, occurs when the systolic pressure is consistently over 140 mmHg, or the diastolic blood pressure is consistently over 90 mmHg.

Influenza: a viral illness that comes on suddenly, causing fever, shaking chills, body aches, headache, and fatigue, which usually last for 3 to 4 days, followed by a dry cough, runny nose, and sore or scratchy throat for another week or so.

International Classification of Diseases, 10th Revision (ICD-10): an alphanumeric coding scheme developed by the World Health Organization, used for mortality data since 1999, that arranges diseases and injuries into groups according to established criteria. It is used to improve comparability of cause of death statistics reported by different governmental entities.

Glossary

Ischemic heart disease: also known as coronary heart disease, is the term given to heart problems caused by a narrowing of the coronary arteries. It includes heart attacks and related problems, such as chest pain or discomfort.

Low birth weight: a live birth with a weight of less than 2500 grams (5lbs. 8oz.).

Non-smokers, adults: persons who have not smoked 100 cigarettes in their lifetime.

Non-smokers, youth: middle and high school students who have not smoked cigarettes on one or more days in the 30 days preceding the survey.

Prevalence: an estimate of how many people in a defined population have a specific disease at a given point in time.

Pneumonia: a bacterial or viral infection of the lungs that may cause fevers, coughing, chills, shallow breathing, chest pains, rapid heartbeat, and weakness or fatigue.

Quit ratio: the percentage of ever smokers who have quit.

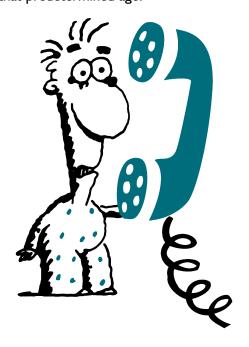
Respiratory distress syndrome: respiratory difficulty in newborn infants common in babies born prematurely.

Short gestation: a fetus born before 37 weeks after conception.

Stroke: occurs when a blood vessel (artery) that supplies blood to the brain bursts or becomes blocked by a blood clot resulting in damage and death of nerve cells in the affected area of the brain.

Sudden infant death syndrome: the sudden and unexpected death of a baby with no known illnesses, typically affecting sleeping infants between the ages of two weeks to six months.

Years of potential life lost: a measure of the impact of premature mortality on a population, calculated as the sum of the differences between some predetermined minimum or desired life span and the age of death for individuals who died earlier than that predetermined age.



References

- US Public Health Service. Smoking and Health Report of the Advisory Committee to the Surgeon General of the Public Health Service. US Department of Health, Education, and Welfare, Public Health Service, Centers for Disease Control. PHS Publication No. 1103, 1964.
- **2.** Centers for Disease Control and Prevention. Tobacco Information and Prevention Source (TIPS). http://www.cdc.gov/tobacco/issue.htm
- 3. National Cancer Institute. Health Effects of Exposure to Environmental Tobacco Smoke: The Report of the California Environmental Protection Agency. Smoking and Tobacco Control Monograph no. 10. Bethesda, MD. US Department of Health and Human Services, National Institutes of Health, National Cancer Institute, NIH Pub. No. 99-4645, 1999.
- 4. US Department of Health and Human Services. Reducing the Health Consequences of Smoking: 25 Years of Progress. A Report of the Surgeon General. US Department of Health and Human Services, Public Health Service, Centers for Disease Control, Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health. DHHS Publication No. (CDC) 89-8411, Prepublication version, January 11, 1989.
- **5.** Centers for Disease Control and Prevention. Behavioral Risk Factor Surveillance System (BRFSS), Nationwide Prevalence Data, 2000. http://www.apps.nccd.cdc.gov/brfss/index.asp
- 6. Centers for Disease Control and Prevention. Cigarette Smoking Among Adults – United States, 2000. MMWR 2002;51: 642-645. http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5129a3.htm
- Centers for Disease Control and Prevention. Annual Smoking-Attributable Mortality, Years of Potential Life Lost, and Economic Costs – United States, 1995-1999. MMWR 2002; 51: 300-303.
- **8.** US Department of Health and Human Services. Women and Smoking. A Report of the Surgeon General. Rockville (MD): US Department of Health and Human Services, Public Health Service, Office of the Surgeon General, 2001.
- Centers for Disease Control and Prevention. Observational Survey of Smoking Provisions in Food Service Establishments – Southeast Health District, Georgia, 2001. MMWR 2003; 52: 307-309.
- **10.** Liang L, Chaloupka FJ. Differential Effects of Cigarette Price on Youth Smoking Intensity. ImpacTeen Research Paper Series No. 6, February 2001.
- II. Czart C, Liccardo Pacula R, Chaloupka FJ, Wechsler H. The Impact of Prices and Control Policies on Cigarette Smoking among College Students. ImpacTeen Research Paper Series No. 12, March 2001.
- 12. Centers for Disease Control and Prevention. Cigarette Smoking Before and After an Excise Tax Increase and an Antismoking Campaign – Massachusetts, 1990-1996. MMWR 1996; 45:966-970.
- 13. US Department of Health and Human Services. Reducing Tobacco Use: A Report of the Surgeon General. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2000.

References

- **14.** National Cancer Institute: State Cancer Legislative Database Program, Bethesda, MD, 2003. http://www.scld-nci.net.
- **15.** Georgia Department of Revenue, 2002 Statistical Report. Accessed at: http://www2.state.ga.us/departments/dor/oic/2002stats/2002statisticalreport.pdf
- **16.** Wall MA, Severson HH, Andrews JA, Lichtenstein E, Zoref L. Pediatric Office-based Smoking Intervention: Impact on Maternal Smoking and Relapse. Pediatrics 1995; 96(4): 622-628.
- 17. Mullen PD, DiClemente CC, Bartholomew LK. Theory and Context and Project PANDA: a Program to Help Post-partum Women Stay Off Cigarettes. In Bartholomew LK, Parcel GS, Kok G, Gottlieb H. Designing *Theory- and Evidence-based Health Promotion Programs*. Mountain View, California: Mayfield Publishers, 2000; 453-477.
- 18. Centers for Disease Control and Prevention. Trends in Cigarette Smoking among High School Students United States 1991-1999. MMWR 2000; 49: 755-758.
- 19. National Cancer Institute. State and Local Legislative Action to Reduce Tobacco Use. Smoking and Tobacco Control Monograph No. 11. Bethesda, MD. US Department of Health and Human Services, National Institutes of Health, National Cancer Institute, NIH Pub. No. 00-4804, 2000.
- 20. 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. MMWR 2000;49:RR-12.
- **21.** Bartosch WJ, Pope GC. The Economic Effect of Smoke-free Restaurant Policies on Restaurant Businesses in Massachusetts. Journal of the Public Health Management Practice. 1999; 5(1): 53-62.
- **22.** Kanny D, Powell KE, Copes K. Georgia Youth Tobacco Survey, 2001. Georgia Department of Human Resources, Division of Public Health, Tobacco Use Prevention Section, June, 2002. Publication number: DPH02.72HW.
- **23.** Zbikowski SM, Bush T, Yepassi-Zembrou P, McAffee T, O'Hara A, Hantz K. Georgia Tobacco Quit Line: Quit Status Report, Year I. Group Health Cooperative Center for Health Promotion. Tukwila, WA, 2002.
- 24. Centers for Disease Control and Prevention. Smoking-attributable mortality, morbidity, and economic costs (SAMMEC): adult SAMMEC and maternal and child health (MCH) SAMMEC application, 2002. http://www.cdc.gov/tobacco/sammec
- **25.** National Center for Health Statistics. *Deaths: Final data for 2000.* National Vital Statistics reports; vol. 50 no. 15. Hyattsville, MD, 2002.
- **26.** Kanny D, Choi, HS, Hammond, DA. School Health Education in Georgia: Results from the 2002 School Health Education Profile (SHEP) Survey. Georgia Department of Human Resources, Division of Public Health, February 2004. Publication Number DPH04.181HW.
- 27. Choi HS, Bricker SK, Troy K, Kanny D, Powell KE. Worksite Health promotion Policies and Practices in Georgia: 2002 Georgia Worksite Survey. Georgia Department of Human Resources, Division of Public Health, January 2004. Publication Number DPH03/156HW.
- **28.** Mellinger-Birdsong A, Blackwell A, Wu M, Mertz KJ, Powell KE. Childhood Asthma in Georgia: Prevalence and Management Practices. Georgia Epidemiology Report. 2003; 19:1-3.

Appendix Tables nt Neoplasms; I cavity, Pharynx 4,235 6,131 hea, Lung, Bronchus Cidney and Renal Pelvis 463 Total Neoplasms Cardiovascular Diseases: 4,226 Ischemic Heart Disease Hypertension 104 Total Cardiovascular Diseases 4,415 miratory Diseases:

Table A. Annual deaths, smoking-attributable mortality (SAM) and years of potential life lost (YPLL) by cause of death and sex, Georgia adults 35 and older and infants one year and younger, 2001

Disease Category	ICD-10*		Male	
Neoplasms		Deaths	SAM	YPLL
Lip, Oral cavity, Pharynx Esophagus Pancreas Larynx Trachea, Lung, Bronchus Cervix Bladder	C00-C14 C15 C25 C32 C33-C34 C53 C67	127 251 349 101 2,598 0	96 183 85 85 2,306 0	1,841 3,390 1,493 1,481 38,124 0 1,127
Kidney and Renal Pelvis	C64-C65	144	58	1,117
Total Neoplasms		3,735	2,893	48,573
Cardiovascular Diseases: Hypertension Ischemic Heart Disease Aged 35-64 years Aged 65+ years Other Heart Disease Cerebrovascular Disease Aged 35-64 years Aged 65+ years Aged 65+ years Afherosclerosis Aortic Aneurysm	110-113 120-125 100-109, 126-151 160-169 170	587 1,675 3,507 2,812 411 1,233 153 199	121 682 569 840 160 128 45	2,222 17,811 5,802 12,806 4,236 1,210 553 714
Other diseases of circulatory system	172-178	99	90	1,224
Total Cardiovascular Diseases		10,676	2,682	46,578
Respiratory Diseases: Pneumonia, Influenza Bronchitis, Emphysema Chronic Airway Obstruction	J10-J18 J40-J43 J44	621 272 1,186	148 248 975	1,815 3,134 12,024
Total Respiratory Diseases		2,079	1,371	16,973
Total Adult		16,490	6,946	112,124
Perinatal Conditions: Short Gestation / Low Birth Weight Respiratory Distress Syndrome Respiratory Conditions - Newborn Sudden Infant Death Syndrome Total Perinatal Conditions	P07 P22 P23-P28 R95	125 16 37 68 246	8 0 1 6	577 19 43 471 1,110
Overall Total		16,736	6,961	113,234

 $^{^*}$ International Classification of Diseases, Tenth Revision used since 1999 for specifying cause of death.

Mortality data were taken from the Georgia Vital Statistics Report.

	Female			Total	
Deaths	SAM	YPLL	Deaths	SAM	YPLL
79 63 342	37 37 79	670 792 1,358	206 314 691	1 33 220 164	2,511 4,182 2,851
19 1,584 106 106	14 1,128 13 29	298 21,407 380 418	120 4,182 106 271	99 3,434 13 109	1,779 59,531 380 1,545
97	5	102	241	63	1,219
2,396	1,342	25,425	6,131	4,235	73,998
872	95	1,576	1,459	216	3,798
649 4,059 3,678	242 411 338	7,163 4,043 5,190	2,324 7,566 6,490	924 980 1,178	24,974 9,845 17,996
339 2,252 280 139 175	153 123 23 19 140	4,707 1,172 237 276 1,814	750 3,485 433 338 274	313 251 68 66 230	8,943 2,382 790 990 3,038
12,443	1,544	26,178	23,119	4,226	72,756
854 271 1,211	117 217 899	1,466 3,235 12,738	1,475 543 2,397	265 465 1,874	3,281 6,369 24,762
2,336	1,233	17,439	4,415	2,604	34,412
17,175	4,119	69,042	33,665	11,065	181,166
96 19 38 44	6 0 1 4	475 24 48 327	221 35 75 112	14 0 2 10	1,052 43 91 798
197	11	874	443	26	1,984
17,372	4,130	69,916	34,108	11,091	183,150

Table B. Annual deaths and smoking-attributable mortality (SAM) in 19 Georgia public health districts, by cause of death, Georgia adults 35 and older, 2001

		Geo	rgia	Clay	rton	Coa	stal	Cobb/E	Oouglas	DeK	alb	
Cause of Death (ICD-10 Descriptions)	ICD-10*	Deaths	SAM	Total	SAM	Total	SAM	Total	SAM	Total	SAM	
Malignant Neoplasms: Lip, Oral cavity, Pharynx Esophagus Pancreas Larynx Trachea, Lung, Bronchus Cervix Bladder Kidney and Renal Pelvis	C00-C14 C15 C25 C32 C33-C34 C53 C67	206 314 691 120 4,182 106 271 241	133 220 164 99 3,434 13 109 63	<5 5 13 6 84 <5 7 6	¶ 4 3 5 69 ¶ 3 2	7 11 16 0 101 <5 10 7	5 8 4 0 83 ¶ 4 2	9 20 46 <5 266 6 15	6 4 1 ¶ 2 8 1 6 4	11 13 39 10 204 5 18	7 9 8 168 1 7 3	
Total Neoplasms		6,131	4,235	121	86	152	106	378	260	311	212	
Cardiovascular Diseases: Hypertension Ischemic Heart Disease Other Heart Disease Cerebrovascular Disease Atherosclerosis Aortic Aneurysm Other diseases of circulatory system	110-113 120-125 100-109, 126-151 160-169 170 171 172-178	1,459 9,890 6,490 4,235 433 338 274	216 1,904 1,178 564 68 66 230	40 233 121 55 8 6 <5	6 45 22 7 I I	27 186 149 103 8 7	4 36 27 14 1 1 6	549 490	12 106 89 30 5 5	121 521 319 273 13 19 18	18 100 58 36 2 4 15	
Total Cardiovascular Diseases		23,119	4,226	463	82	487	89	1,415	260	1,284	233	
Respiratory Diseases: Pneumonia, Influenza Bronchitis, Emphysema Chronic Airway Obstruction	J10-J18 J40-J43 J44	1,475 543 2,397	265 465 1,874	30 11 63	5 9 49	33 35 56	6 30 44	72 41 163	13 35 127	99 27 102	18 23 80	
Total Respiratory Diseases		4,415	2,604	104	63	124	80	276	175	228	121	
Total Adult		33,665	11,065	688	231	763	275	2,069	695	1,823	566	

 $^{^{*}}$ International Classification of Diseases, Tenth Revision, used since 1999 for specifying cause of death.

[¶] This symbol is shown instead of the estimate when the number of deaths in the health district is less than five.

Ea	st	East C	entral	East N	1etro	Fult	on	LaGr	ange	No	rth	North	Central	North (Georgia
Total	SAM	Total	SAM	Total	SAM	Total	SAM	Total	SAM	Total	SAM	Total	SAM	Total	SAM
10 12 28 5 149 <5 11 8	6 8 7 4 122 ¶ 4 2	11 14 42 9 264 <5 19	7 10 10 7 217 ¶ 8 5	10 19 38 7 271 9 18	6 13 9 6 223 1 7 4	16 29 67 10 310 7 20 21	10 20 16 8 255 1 8 5	12 30 61 11 342 12 30 24	8 21 14 9 281 1 12 6	12 25 41 <5 250 <5 18	8 18 10 ¶ 205 ¶ 7 3	21 25 51 11 309 6 20 15	14 18 12 9 254 1 8 4	7 6 25 <5 189 <5 9 10	5 4 6 ¶ 155 ¶ 4 3
223	153	377	264	389	269	480	323	522	352	357	251	458	320	246	177
27 445 349 143 6 14 7	4 86 63 19 1 3 6	81 633 364 301 17 22 18	12 122 66 40 3 4 15	71 503 339 220 10 34 12	11 97 62 29 2 7 10	247 833 507 358 31 27 33	37 160 92 48 5 5 28	111 782 564 401 52 22 21	16 151 102 53 8 4 18	53 640 419 238 18 15	8 123 76 32 3 3	128 746 431 303 64 30 14	19 144 78 40 10 6	36 344 302 150 36 14	5 66 55 20 6 3 9
991	182	1,436	262	1,189	218	2,036	375	1,953	352	1,397	257	1,716	299	893	164
67 16 85	12 14 66	97 14 148	17 12 116	81 55 119	15 47 93	148 45 148	27 39 116	131 40 226	24 34 177	96 42 157	17 36 123	106 29 169	19 25 132	72 22 103	13 19 81
168	92	259	145	255	155	341	182	397	235	295	176	304	176	197	113
1,382	427	2,072	671	1,833	642	2,857	880	2,872	939	2,049	684	2,478	795	1,336	454

Table B. Annual deaths and smoking-attributable mortality (SAM) in 19 Georgia public health districts, by cause of death, Georgia adults 35 and older, 2001 cont'd...

Northeast		Northwest		South		South Central		South East		Southwest		West Central	
Total	SAM	Total	SAM	Total	SAM	Total	SAM	Total	SAM	Total	SAM	Total	SAM
6	4	12	8	10	6	9	6	13	8	16	10	13	8
26	18	18	13	12	8	<5	¶	П	8	18	13	20	14
29	7	47	11	23	5	20	5	29	7	44	10	35	8 7
<5	¶	12	10	7	6	<5	¶	<5	¶	6	5	9	
172	141	383	314	161	132	84	69	208	171	239	196	200	164
7	- 1	6	- 1	<5	¶	7	I	10	- 1	14	2	8	- 1
17	7	19	8	<5	¶	<5	¶	9	4	14	6	11	4
13	3	15	4	12	3	<5	¶	6	2	16	4	12	3
270	181	512	369	225	160	120	81	286	201	367	246	308	209
74	11	70	10	47	7	19	3	63	9	82	12	96	14
525	101	869	167	295	, 57	229	44	462	89	546	105	594	114
257	47	435	79	230	42	206	37	424	77	405	74	349	63
219	29	269	36	136	18	107	14	259	34	272	36	253	34
13	2	38	6	18	3	9	ı	20	3	13	2	28	4
18	4	21	4	9	2	5	I	21	4	17	3	20	4
8	7	30	25	14	3 2 12	6	5	16	13	20	17	12	10
1,114	201	1,732	327	749	141	581	105	1,265	229	1,355	249	1,352	243
42	8	93	17	72	13	30	5	79	14	73	13	83	15
23	20	40	34	16	14		4	26	22	36	31	21	18
112	88	197	154	103	81	71	56	137	107	109	85	133	104
177	116	330	205	191	108	106	65	242	143	218	129	237	137
1,561	498	2,574	901	1,165	409	807	251	1,793	573	1,940	624	1,897	589

Table C. Smoking prevalence among adults 18 and older by public health district, Georgia, 2001

	Current Smoker		Former	Smoker	Never Smoker		
District	%	95% CI	%	95% CI	%	95% CI	
I-I: Northwest (Rome)	31.4	(± 6.7)	22.1	(± 5.9)	46.4	(± 6.9)	
I-2: North Georgia (Dalton)	28.1	(± 6.8)	21.0	(± 5.8)	50.9	(± 7.6)	
2: North (Gainesville)	23.5	(± 6.2)	32.0	(± 6.8)	44.5	(± 7.4)	
3-1: Cobb/Douglas (Marietta)	16.6	(± 5.5)	21.6	(± 6.5)	61.8	(± 7.6)	
3-2: Fulton (Atlanta)	22.1	(± 6.6)	18.4	(± 6.3)	59.6	(± 7.9)	
3-3: Clayton (Morrow)	25.1	(± 6.4)	13.7	(± 4.8)	61.2	(± 7.0)	
3-4: East Metro (Lawrenceville)	29.2	(± 6.9)	21.6	(± 5.5)	49.2	(± 7.5)	
3-5: DeKalb (Decatur)	18.5	(± 6.1)	15.4	(± 5.6)	66.1	(± 7.7)	
4: LaGrange (LaGrange)	22.7	(± 5.8)	24.0	(± 5.9)	53.3	(± 6.9)	
5-1: South Central (Dublin)	24.1	(± 7.0)	22.6	(± 6.2)	53.3	(± 8.0)	
5-2: North Central (Macon)	28.0	(± 7.1)	22.5	(± 5.9)	49.5	(± 7.2)	
6: East Central (Augusta)	26.0	(± 6.4)	19.1	(± 5.3)	54.8	(± 7.2)	
7: West Central (Columbus)	18.8	(± 6.8)	21.9	(± 5.9)	59.3	(± 8.0)	
8-1: South (Valdosta)	24.0	(± 6.7)	19.8	(± 5.9)	56.1	(± 7.8)	
8-2: Southwest (Albany)	19.1	(± 5.6)	23.8	(± 6.1)	57.1	(± 7.1)	
9-1: East (Savannah)	26.3	(± 6.4)	22.8	(± 6.1)	50.9	(± 7.4)	
9-2: Southeast (Waycross)	32.2	(± 6.8)	18.4	(± 5.7)	49.4	(± 7.2)	
9-3: Coastal (Brunswick)	28.1	(± 6.3)	19.0	(± 5.3)	52.9	(± 7.1)	
10: Northeast (Athens)	24.6	(± 7.1)	18.6	(± 5.5)	56.8	(± 8.0)	

Source: BRFSS 2001

Table D. Smoking prevalence among middle and high school students by participating public health district, Georgia, 2001

	Middle	School	High	School	
Health District	%	95% CI	%	95% CI	
I-2: North Georgia (Dalton)	12.7	(±5.4)	-	-	
3-2: Fulton (Atlanta)	4.3	(±2.5)	-	-	
4: LaGrange (LaGrange)	12.8	(±4.3)	-	-	
5-1: South Central (Dublin)	11.9	(±2.1)	25.7	(±5.9)	
6: East Central (Augusta)	10.1	(±6.0)	21.4	(±6.9)	
7: West Central (Columbus)	7.6	(±2.3)	23.7	(±4.9)	
8-2: Southwest (Albany)	10.2	(±2.0)	28.2	(±4.4)	
9-2: Southeast (Waycross)	11.8	(±2.3)	25.5	(±4.5)	
9-3: Coastal (Brunswick)	8.8	(±1.4)	23.2	(±3.3)	

⁻ Data not available for high schools in these districts.



Healthy People 2010 Objective

Objective 27-1a: Reduce the proportion of adults who currently smoke cigarettes. Target: 12%	24% of Georgia adults are current cigarette smokers.
Objective 27-2a: Reduce the proportion of students in grades 9 through 12 who are current users of any tobacco products.	32% of Georgia high school students currently use any tobacco product.
Target: 21%	
Objective 27-2b: Reduce the proportion of students in grades 9 through 12 who are current cigarette smokers.	24% of Georgia high school students are current cigarette smokers.
Target: 16%	
Objective 27-2c: Reduce the proportion of students in grades 9 through 12 who are current smokeless tobacco users.	10% of Georgia high school students are current smokeless tobacco users.
Target: 1%	
Objective 27-2d: Reduce the proportion of students in grades 9 through 12 who are current cigar smokers.	15% of Georgia high school students are current cigar smokers.
Target: 8%	
Objective 27-3: Reduce the proportion of children and adolescents who begin using tobacco products (in Development)	Objective in development, has not yet been established nationally.
Target: in development	

Healthy People 2010 Objective

Objective 27-4a: Increase the average age of first use of tobacco products by adolescents aged 12 to 17 years.	The most prevalent age of initiation for high school students who smoke is in the age group 13-14.
Target: 14	
Objective 27-4b: Increase the average age of first use of tobacco products by young adults aged 18 to 25 years.	Data have not been collected in Georgia.
Target: 17	
Objective 27-5: Increase the proportion of adult smokers who have attempted to quit smoking.	59% of adult smokers in Georgia have attempted to quit smoking.
Target: 75%	
Objective 27-6: Increase the proportion of pregnant women who quit smoking during the first trimester of their pregnancy.	Data for planning purposes only.
Target: 30%	
Objective 27-7: Increase the proportion of smokers in grades 9 through 12 who have attempted to quit smoking.	53% of high school smokers in Georgia have attempted to quit smoking in the past 12 months
Target: 84%	
Objective 27-8: Increase in insurance coverage of evidence-based treatment for nicotine dependency.	Data collection in planning (Health Plan Policy Survey).
Target: 100%	
Objective 27-9: Reduce the proportion of children 6 years and under who are regularly exposed to tobacco smoke at home.	33% of children 5 years and under lived in a household where at least one adult smoked inside or away from the house (28).
Target: 10%	

Table E. Healthy People 2010 Objectives and Current Status of Objectives in Georgia Related to **Tobacco Use**

Healthy People 2010 Objective

Objective 27-10: Reduce the proportion of non-smokers aged 4 years and older who are exposed to environmental tobacco smoke. Target: 45% (Through measurements of serum cotinine levels in the blood.)	Laboratory test-confirmed data are not available.
Objective 27-11: Increase the proportion of schools that are smoke-free and tobacco-free, to include all school facilities, property, vehicles, and school events. Target: 100%	99% of middle schools and high schools in Georgia have policies that specifically prohibit tobacco use in school buildings, in school vehicles, and at off-campus events.
Objective 27-12: Increase the proportion of worksites with formal policies prohibiting or limiting smoking to separately ventilated areas. Target: 100%	90% of Georgia worksites have formal policies that specifically prohibit smoking on the job.
Objective 27-13: Increase or establish laws on smoke-free indoor air that prohibit or limit smoking to separately ventilated areas in public places and worksites. Target: 51%	20% of Georgia jurisdictions have laws on smoke-free indoor air that prohibit or restrict smoking.
Objective 27-14: Increase the number of States and Territories that reduce the proportion of illegal sales of tobacco products to minors through the enforcement of laws prohibiting the sale of tobacco products to minors. Target: all 50 States, the District of Columbia, and all US territories.	Synar Amendment and Georgia Synar Report, conducted by the Division of Mental Health, Developmental Disabilities, and Addictive Diseases of the Georgia Department of Human Resources.

Table E. Healthy People 2010 Objectives and Current Status of Objectives in Georgia Related to Tobacco Use

Healthy People 2010 Objective

Objective 27-15: Increase the number of States and the District of Columbia that suspend or revoke State retail licenses for violations of laws prohibiting the sale of tobacco products to minors. Target: all 50 States and the District of Columbia	The Alcohol and Tobacco Division of the Georgia Department of Revenue is in charge of enforcement.
Objective 27-16: Eliminate tobacco advertising and promotions that influence adolescents and young adults (in development).	Objective in development, has not yet been established nationally.
Objective 27-17: Increase the proportion of students in 8th, 10th and 12th grades who disapprove smoking.	Data not collected in Georgia.
Target: 95%	
Objective 27-18: Increase the number of Tribes, Territories and States and the District of Columbia with comprehensive, evidence-based tobacco control programs (in development).	The Tobacco Use Prevention Section, Division of Public Health, Georgia Department of Human Resources was established in October 2001 and is a comprehensive, evidence-based tobacco control program.
Objective 27-19: Eliminate the number of States with laws that preempt stronger tobacco control laws.	There are no preemptive laws in Georgia.
Target: Zero States	
Objective 27-20: Reduce the toxicity of tobacco products by establishing a regulatory structure to monitor toxicity (in development).	Objective in development, has not yet been established nationally.
	I .



