5 · Tobacco-Use Prevention/ Cessation and Lung Cancer

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TOBACCO-USE PREVENTION/CESSATION AND LUNG CANCER

Tobacco use is the single most preventable cause of death and disease in the United States and Maryland. Smoking cigarettes increases the risk of dying from at least ten types of cancer and a variety of heart and respiratory diseases.

SMOKERS HAVE SHORTER LIVES and higher medical expenses as compared to non-smokers. In this chapter, the burden of tobacco use, risk of incidence for cancer, tobacco-use prevention and treatment programs, and policies are examined.

Burden of Tobacco-Related Disease

Human Toll of Cigarette Smoking on Maryland Residents

HALF OF ALL LONG-TERM CIGARETTE SMOKERS die prematurely from a smoking-related illness.[1] The Centers for Disease Control and Prevention (CDC) estimates an average of 6,861 Maryland adults die prematurely every year as a result of cigarette smoking.[2] Of these, 2,339 (34.1%) die prematurely as a result of cancers of the lung, bronchus, and trachea (Table 5.1). Another 149,600[3] suffer from one or more cancers, cardiovascular diseases, or respiratory diseases caused by past or current smoking.

Increasing both the number of Maryland residents who have never smoked a cigarette and the number of current cigarette smokers who quit and continue to stay quit will greatly reduce preventable deaths and suffering from smoking-related diseases. Together, tobacco-use prevention and cessation programs and policies are the primary mechanisms recommended to reduce cancers of the lung, bronchus, and trachea, while at the same

TABLE 5.1 **Estimated Average Annual Cigarette Smoking-Attributable Mortality among Adults Ages 35 and Older, Maryland 2000-2004**

Number (#) and Percentage (%) of 6,861 Estimated Average Annual Premature Deaths

CANCER SITES	MALE #	FEMALE #	TOTAL #	MALE %	FEMALE %	TOTAL %
Lung, Bronchus, Trachea	1,404	935	2,339	20.5%	13.6%	34.1%
Esophagus	133	34	167	1.9%	0.5%	2.4%
Lip, Oral Cavity, Pharynx	74	20	94	1.1%	0.3%	1.4%
Stomach	31	13	44	0.5%	0.2%	0.6%
Pancreas	56	70	126	0.8%	1.0%	1.8%
Larynx	56	12	68	0.8%	0.2%	1.0%
Cervix Uteri	0	9	9	—	0.1%	0.1%
Kidney and Renal Pelvis	46	2	48	0.7%	—	0.7%
Urinary Bladder	66	23	89	1.0%	0.3%	1.3%
Acute Myeloid Leukemia	14	6	20	0.2%	0.1%	0.3%
Cancer and Other Diseases						
All Cancers	1,880	1,124	3,004	27.4%	16.4%	43.8%
All Cardiovascular Diseases	1,296	929	2,225	18.9%	13.5%	32.4%
All Respiratory Diseases	755	877	1,632	11.0%	12.8%	23.8%

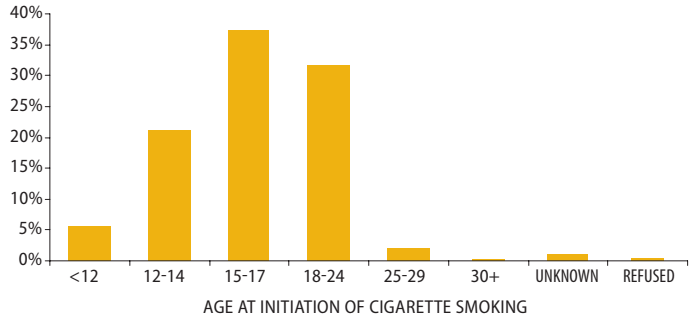
Source: Smoking Attributable Mortality, Morbidity, and Economic Costs (SAMMEC), 2000-2004.

time reducing the other premature deaths from other cancers and diseases attributable to cigarette smoking. Other tobacco products (cigars, chew, snuff, etc.) also pose cancer and other health risks.

Economic Burden on Maryland Residents

ALMOST 8.5% OF ALL MEDICAL CARE EXPENDITURES in Maryland are avoidable, the direct result of treatment for cancers and other diseases caused by cigarette smoking.[4] The total annual direct cost of treating cancers and disease in Maryland caused by cigarette smoking was estimated at $2.26 billion in 2000.[5]

FIGURE 5.1 **Age at Which Initiated Cigarette Smoking As Reported by Maryland Adults Ages 18 and Older, 2008**



Source: Maryland Adult Tobacco Survey, 2008.

TABLE 5.2 **Cancers of the Lung, Bronchus, and Trachea, Maryland 2004**

Proportion of Cases Attributable to Cigarette Smoking, by Gender and Age

MALE		FEMALE	
AGE 35-64	AGE 65+	AGE 35-64	AGE 65+
88%	86%	73%	71%

Source: Smoking Attributable Mortality, Morbidity, and Economic Costs (SAMMEC), 2004.

Cancers of the Lung, Bronchus, and Trachea

Risk of Cancers

WHEN ADDRESSING TOBACCO-USE PREVENTION and cessation and the impact of smoking on health, the CDC groups cancers of the lung, bronchus, and trachea together. In this chapter these cancers are similarly grouped where possible for consistency.

Lung cancer by itself is the leading cause of cancer deaths in both men and women in Maryland. Including the tobacco-related cancers of the bronchus and trachea increases the magnitude of the problem that tobacco use presents. Epidemiologic studies have firmly established that the incidence of these three cancers is largely due to past or present cigarette smoking by the individual with cancer (up to 88% of cases attributable, see Table 5.2).[6] Other known causes include exposure to secondhand smoke, exposure to naturally occurring radon gas, and occupational exposures to a number of substances including nickel, chromates, coal, arsenic, beryllium, and iron.

The relative risk for cancers of the lung, bronchus, and trachea are, accordingly, lowest for adults who have never smoked a cigarette and highest for those who currently smoke. Individuals who quit smoking and continue to stay quit (former smokers) have significantly reduced risk compared to current smokers, but still have a higher risk than never smokers.

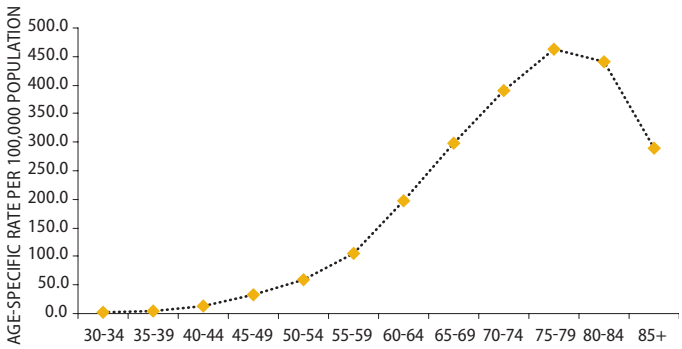
Among smokers and former smokers, the risk for lung cancer is greater for those who initiated smoking at younger ages compared to those who initiated smoking when they were older.[7] In Maryland the majority (64.3%) of adult cigarette smokers report that they started smoking before they were 18 years old and 96% report that they started smoking before they were 25 years old (Figure 5.1).

In addition to increased risk due to a younger age of initiation, cancers of the lung, bronchus, and trachea are dose-dependent (i.e., dependent on how long the person has smoked, the number of cigarettes smoked per day, and the inhaling pattern).[8]

Incidence of Cancer

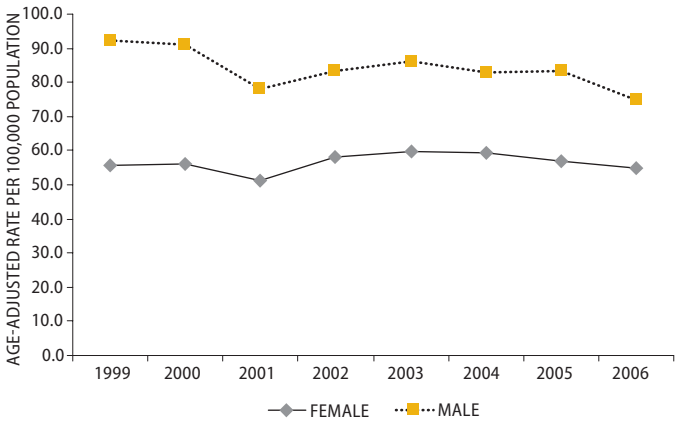
CIGARETTE SMOKING AT AN EARLY AGE increases the risk for these cancers at any age, and the increased risk continues throughout the life of the smoker (although smokers who quit are at reduced risk as compared to current smokers). Figure 5.2 presents data on the average annual incidence rates of lung, bronchus, and trachea in Maryland, by age,

FIGURE 5.2 Lung, Bronchus and Trachea Cancer, Age at Diagnosis, Maryland, 2002-2006



Incidence Rates are per 100,000 and are age-adjusted to 2000 US standard population.
Source: Maryland Cancer Registry, 2002-2006.

FIGURE 5.3 Lung, Bronchus and Trachea Cancer Incidence by Gender, Maryland, 1999-2006



Rates are per 100,000 population and are age-adjusted to the 2000 US standard population.
Source: Maryland Cancer Registry, 1999-2006.

for the period 2002 through 2006. Although 96% of smokers initiate smoking before the age of 25, there is a long latency between smoking and the development of these cancers. Therefore, cancer rates are relatively low in persons less than 50 years of age. Case rates then increase, peaking at ages 75-79.

Maryland's incidence of cancers of the lung, bronchus, and trachea is higher than the US as a whole. The incidence rate for these cancers varies considerably among Maryland's 24 jurisdictions. These rates range from a low of 43.1 per 100,000 in Montgomery County to a high of 102.4 per 100,000 in Somerset County (Table 5.3) and likely reflect varying levels of historical cigarette smoking among county residents 25 to 60 years ago.

Similarities and Differences in Incidence

THE INCIDENCE RATE for cancers of the lung, bronchus, and trachea in Maryland is higher than the US rate. Among blacks or African Americans in Maryland the rate is lower than the US rate, whereas the incidence rate for whites in Maryland is higher than the US rate. In Maryland, the lung, bronchus, and trachea incidence rate for blacks or African Americans is lower than the rate among whites (Table 5.4).

These cancer-specific incidence rates for both males and females in Maryland are higher than for their respective US rates, and Maryland males have higher incidence rates than Maryland females similar to US patterns of incidence (Figure 5.3). Historically, the prevalence of cigarette smoking among males has been higher than for females (although in the recent past smoking rates have been equivalent). This is consistent with finding higher incidence of these cancers in the male population.

MALES BY RACE

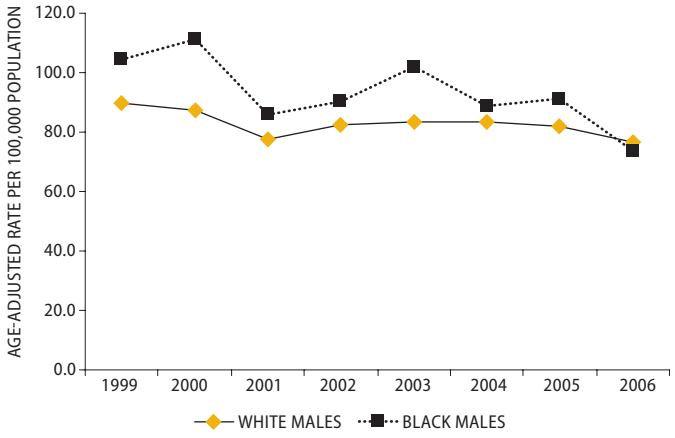
BLACK OR AFRICAN AMERICAN MALES in Maryland have lower incidence rates of smoking-related cancers of the lung, bronchus, and trachea than do black or African American males in the US, whereas white males in Maryland have higher incidence rates than white

TABLE 5.3 Lung, Bronchus, and Trachea Cancer Incidence Rates by Jurisdiction, 2002-2006

RANK	JURISDICTION	INCIDENCE RATE
1	Somerset	102.4
2	Caroline	92.8
3	Dorchester	90.3
4	Wicomico	88.3
5	Baltimore City	85.6
6	Allegany	84.4
7	Cecil	83.6
8	Kent	82.9
9	Queen Anne's	80.6
10	St. Mary's	78.3
11	Calvert	78.0
12	Worcester	77.6
13	Baltimore County	76.6
14	Harford	75.3
15	Frederick	75.1
16	Talbot	73.3
17	Carroll	71.8
18	Washington	71.2
19	Anne Arundel	70.8
20	Charles	66.3
21	Prince George's	55.3
22	Garrett	55.2
23	Howard	52.7
24	Montgomery	43.1

Rates are per 100,000 population and are age-adjusted to the 2000 US standard population.
Source: Maryland Cancer Registry, 2006.

FIGURE 5.4 Lung, Bronchus and Trachea Cancer Incidence Rates by Race for Males, Maryland, 1999-2006



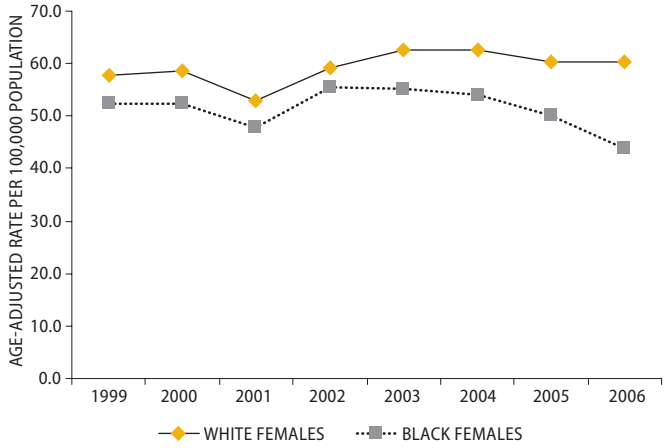
Rates are per 100,000 population and are age-adjusted to the 2000 US standard population.
Source: Maryland Cancer Registry, 1999-2006.

TABLE 5.4 Lung, Bronchus, and Trachea Cancer Incidence by Gender and Race, Maryland and US, 2006

	TOTAL	MALES	FEMALES	WHITES	BLACKS
MD New Cases (count)	3,516	1,779	1,721	2,720	715
MD Incidence Rate	63.4	74.7	55.0	67.1	55.3
US SEER Rate	60.7	73.3	51.4	62.0	71.4

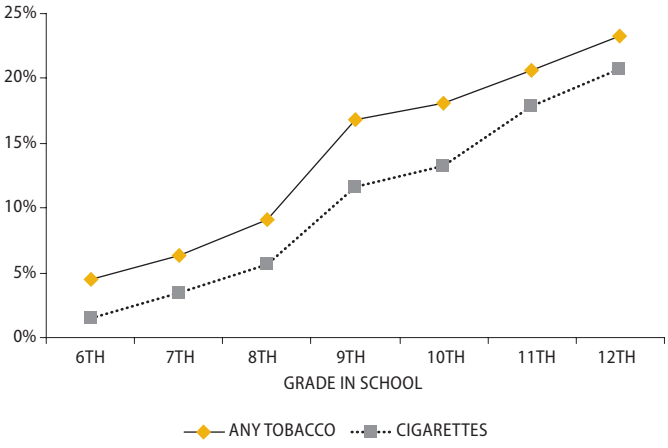
Rates are per 100,000 population and are age-adjusted to the 2000 US standard population.
Source: Maryland Cancer Registry, 2006.

FIGURE 5.5 Lung, Bronchus, and Trachea Cancer Incidence Rates by Race for Females, Maryland, 1999-2006



Rates are per 100,000 population and are age-adjusted to the 2000 US standard population.
Source: Maryland Cancer Registry, 1999-2006.

FIGURE 5.6 Current Cigarette Smoking and Tobacco Use, Maryland Middle and High School Youth (All Ages), 2008



Source: Maryland Youth Tobacco Survey, 2008.

males in the US. Within Maryland, black or African American males have historically had higher incidence rates as compared to white males, although this disparity has been decreasing in recent years (Figure 5.4).

FEMALES BY RACE

BLACK OR AFRICAN AMERICAN FEMALES in Maryland have slightly lower or about the same incidence rates for these cancers than black or African American females in the US, whereas white females in Maryland have higher incidence rates than white females in the US. Within Maryland, black or African American females have lower incidence rates compared to white females (Figure 5.5). Rates have been decreasing at a faster rate among black or African American women whereas the white female rate has been relatively stable since 2003.

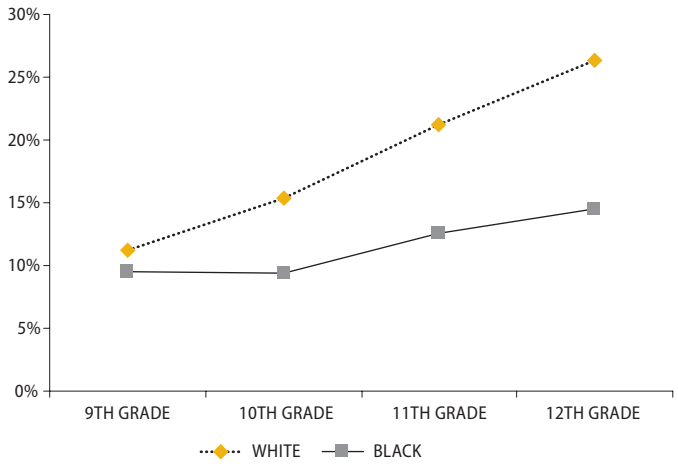
High-Risk Populations

AS NOTED PREVIOUSLY, the risk for cancers of the lung, bronchus, and trachea are greatest among those who initiated smoking at younger ages (for former and current smokers). Among current smokers, identification of populations who have the highest rates of smoking can provide a foundation for targeting utilization of scarce resources to where the greatest risk for these cancers exists.

Youth Cigarette Smoking and Tobacco Use

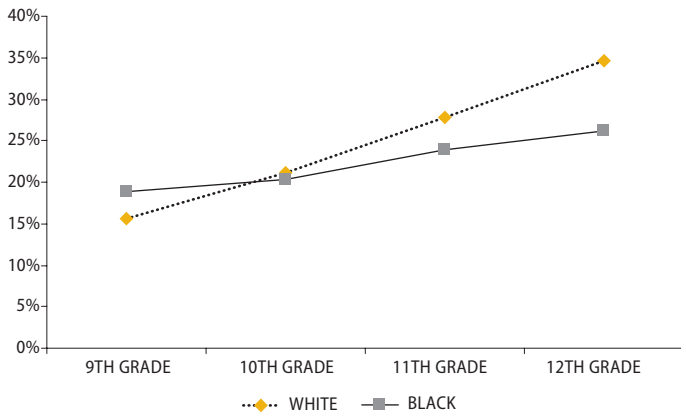
CIGARETTE SMOKING increases as grade level increases, with 12th-grade youth having the highest rates of cigarette smoking (20.7%) (Figure 5.6). The largest relative increase in the proportion of students smoking occurs between the eighth and ninth grades (a 103.5% increase), which in Maryland coincides with the transition from middle to high school.

FIGURE 5.7 Current Cigarette Smoking, by Race, Maryland High School Youth (All Ages), 2008



Source: Maryland Youth Tobacco Survey, 2008.

FIGURE 5.8 Current Use of Any Tobacco Product, by Race, Maryland High School Youth (All Ages), 2008



Source: Maryland Youth Tobacco Survey, 2008.

Among youth attending public high schools, black or African American high school youth are less likely to smoke cigarettes or use any form of tobacco than are white high school youth. In 12th grade, 14.5% of black or African American youth and 26.3% of white youth report that they currently smoke cigarettes; 26.1% of black or African American youth and 34.7% of white youth report that they currently use some form of tobacco (Figure 5.7, Figure 5.8).

The pattern observed for use of any tobacco product by race holds true when comparing by both race and gender. White high school youth, both male and female, report higher rates of tobacco products than do black or African American high school youth. That being said, the rate of tobacco use by males of both races is high. In 12th grade, 30.8% of black or African American males report that they currently use some form of tobacco as compared to 40.9% of whites.

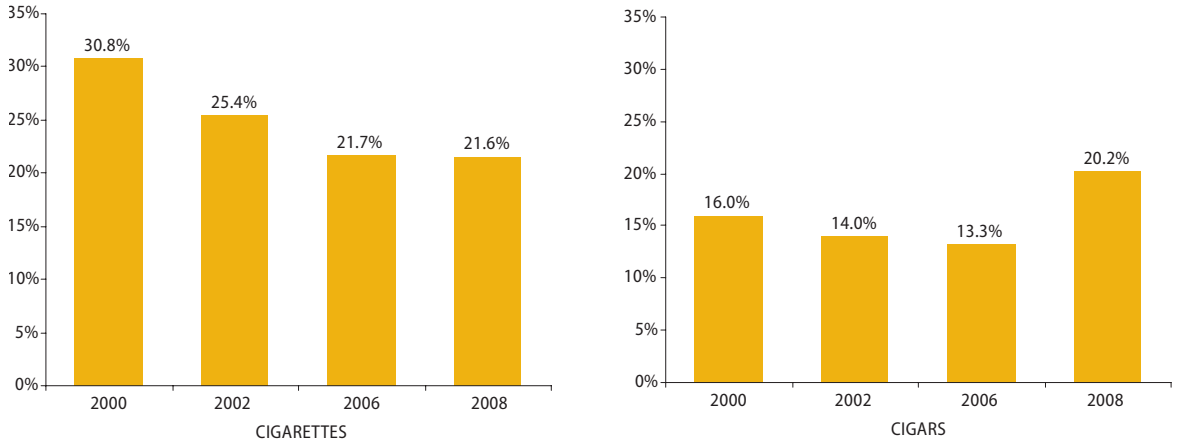
In 2008, more than 50% of current 12th-grade smokers reported that they smoked both cigarettes and cigars during the past 30 days (12.5% of all 12th-grade youth). The use of cigarettes and cigars among Maryland 12th-grade youth declined steadily between 2000 and 2006. However, between 2006 and 2008 the decline in cigarette smoking stopped (Figure 5.9). At the same time, cigar smoking appears to have increased. This may be due to:

- The survey questionnaire containing a better explanation of what a cigar is.
- A shift towards cigars at least part of the time by youth seeking to escape the $1.00 per pack increase in Maryland excise tax on cigarettes.
- The availability of cigars sold singly, and therefore more inexpensive.
- "Attractive" flavoring of cigars.
- A combination of these and other factors.

Because cigarette smoking most commonly starts before adulthood and only intensifies once an adult, jurisdictional differences in smoking rates among 12th-grade youth are equally important as adult smoking rates when attempting to craft tobacco-control programs. Table 5.5 examines tobacco use by 12th-grade youth by jurisdiction (including those who were 18 years old at the time of the survey).

The data reviewed so far are limited to those youth who attend school. School-based surveys cannot reach those who have dropped out or are absent when surveys are administered. In an attempt to develop a proxy measure for tobacco use by youth who are not present when surveys are administered, youth were asked about the number of days that they had missed school

FIGURE 5.9 Current Use of Cigarettes or Cigars, Maryland 12th-Grade High School Youth (All Ages), 2000-2008



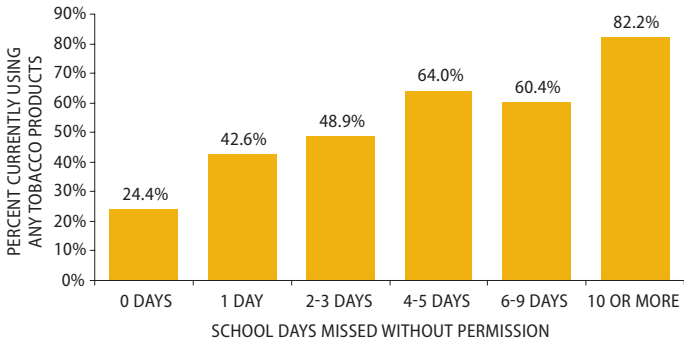
Source: Maryland Youth Tobacco Survey, 2000-2008.

TABLE 5.5 Current Use of Any Tobacco Product, 12th-Grade Maryland Youth, 2008

RANK	JURISDICTION	PREVALENCE
1	Garrett	40.8%
2	Washington	40.2%
3	Somerset	39.6%
4	Kent	39.5%
5	Frederick	39.5%
6	Queen Anne's	39.1%
7	Caroline	38.9%
8	Cecil	38.7%
9	Anne Arundel	38.2%
10	Talbot	37.7%
11	Dorchester	37.5%
12	Worcester	37.4%
13	Allegany	36.7%
14	Carroll	35.7%
15	Baltimore County	32.6%
16	Wicomico	32.3%
17	Harford	32.2%
18	St. Mary's	31.9%
19	Calvert	31.8%
20	Howard	31.0%
21	Charles	30.1%
22	Baltimore City	26.4%
23	Montgomery	25.8%
24	Prince George's	22.8%

Source: Maryland Youth Tobacco Survey, 2008.

FIGURE 5.10 Current Use of Any Tobacco Product by School Days Missed without Permission, Maryland Middle and High School Youth, 2008



Source: Maryland Youth Tobacco Survey, 2008.

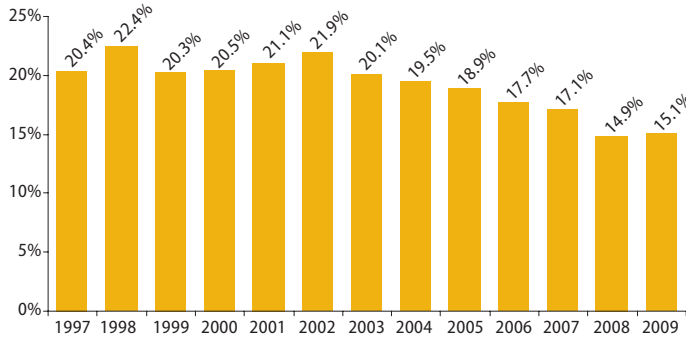
without permission during the past 30 days. Figure 5.10 reveals that those youth who have a high rate of absenteeism have far higher rates of tobacco use. This statistic suggests that youth not regularly attending school or who have dropped out are at far higher risk for tobacco use (and cancers of lung, bronchus, and trachea later in life). Data for jurisdictions with higher drop-out rates or attendance issues are likely underestimated to the extent to which those issues are present.

Adult Current Smokers

IN MARYLAND, adult cigarette smoking has decreased significantly over time (-26% from 1997 to 2009), with the greatest progress occurring since 2002 (Figure 5.11). However, there remains considerable variation in cigarette smoking among jurisdictions, from a low of 5.8% in Howard County to a high of 22.6% in Somerset County as shown in Table 5.6.

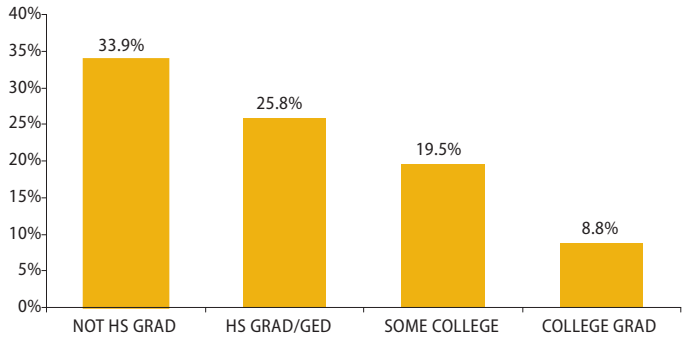
In Maryland, approximately 15% (642,000) of adults are at high risk for cancers of the lung, bronchus, and trachea due to their ongoing cigarette smoking. An additional 24% (1,100,000) are at moderate risk as former smokers, while 61% (2,600,000) are at low risk as never smokers. Because current research does not support lung-cancer screenings as an effective prevention measure, but rather tobacco-use prevention and cessation, this chapter focuses on effective cessation measures, as well as the prevention of tobacco-use initiation among youth and young adults in Maryland.

FIGURE 5.11 Estimated Current Cigarette Smoking, Maryland Adults Ages 18 and Older, 1997-2009



Source: Maryland Behavioral Risk Factor Surveillance System, 1997-2009.

FIGURE 5.12 Current Adult Cigarette Smoking By Highest Educational Attainment, 2004-2008



Source: Maryland Behavioral Risk Factor Surveillance System, 2004-2008.

Disparities in Adult Cigarette Smoking

THERE WERE NO STATISTICALLY SIGNIFICANT DIFFERENCES in the estimated prevalence of cigarette smoking in 2009 between Maryland adult black or African Americans (16.2%) and whites (15.3%).[9] However, when cigarette smoking was examined by income group and educational attainment, statistically significant differences were found. Low numbers of smokers within the survey sample for other races/ethnicities prevented development of estimates for those populations.

With respect to income, smoking rates were generally higher when household income was less than $50,000 as compared to households earning $50,000 or more. Cigarette smoking was found to be inversely related to educational attainment; that is, the higher the education level, the lower the prevalence of cigarette smoking. This relationship was found to be true for the general adult population (Figure 5.12), as well as separately by race and gender. Differences in smoking prevalence between education levels are all statistically significant. (Analysis focuses on differences by educational attainment because fewer survey respondents provided income information, which precluded any examination by both income and race/gender).

Approximately 60% of adult black or African American smokers and 50% of adult white smokers had a high school diploma/GED (or less). Approximately 50% of adult female and male cigarette smokers' highest educational attainment stopped with a high school diploma/GED (or less).

Reducing the Incidence of Cancers of the Lung, Bronchus, and Trachea

WITH UP TO 88% OF CANCERS of the lung, bronchus, and trachea being the result of past or current cigarette smoking,[10] the primary mechanisms for reducing incidence are (1) to prevent the initiation of cigarette smoking by youth and young adults, and (2) to encourage and assist current smokers to quit smoking and to stay quit.

TABLE 5.6 Estimated Adult Current Cigarette Smoking, 2008

RANK	JURISDICTION	PREVALENCE
1	Somerset	22.6%
2	Allegany	20.4%
3	Caroline	20.3%
4	Cecil	19.3%
5	Talbot	17.9%
6	Worcester	17.7%
7	Baltimore City	16.7%
8	Wicomico	16.7%
9	Kent	16.1%
10	Calvert	16.0%
11	Charles	16.0%
12	St. Mary's	15.6%
13	Dorchester	15.3%
14	Queen Anne's	14.6%
15	Baltimore County	13.7%
16	Washington	13.0%
17	Prince George's	12.6%
18	Frederick	12.2%
19	Anne Arundel	11.5%
20	Harford	11.4%
21	Garrett	10.8%
22	Carroll	10.5%
23	Montgomery	7.2%
24	Howard	5.8%

Source: Maryland Adult Tobacco Survey, 2008.

CDC "Best Practice Recommendations"

CDC has published evidence-based state-specific recommendations for implementation of comprehensive tobacco use prevention and cessation programs.[11] The program components recommended by the CDC include: State and Community Interventions; Health Communication Interventions; Cessation Interventions; Surveillance and Evaluation; and Administration and Management. These components are described in Table 5.7.

The CDC describes its best practice recommendations as "…an integrated programmatic structure for implementing interventions proven to be effective and provides the recommended level of state investment to reach these goals and reduce tobacco use in each state." Further, the CDC stresses that "it is important to recognize that these individual components must work together to produce the synergistic effects of a comprehensive tobacco control program."[12] Absent funding to support all of the individual components, efforts should focus on the most impactful interventions: statewide quitline, communications interventions, and surveillance.

Goals, Objectives, and Strategies

THE FOLLOWING GOALS, OBJECTIVES, AND STRATEGIES are largely focused on broad population based strategies, such as policies and legislation. Focusing attention on policies, programs, and legislation that impact the larger environment has a greater potential for influencing individual level change. The Community Guide to Preventive Services and CDC Best Practices for Comprehensive Tobacco Control Programs were used to guide the development of the Goals, Objectives, and Strategies.

TABLE **5.7** CDC Best Practice Program Components

State and Community Interventions	**STATE AND COMMUNITY INTERVENTIONS** include supporting and implementing programs and policies to influence societal organizations, systems, and networks that encourage and support individuals to make behavior choices consistent with tobacco-free norms. The social norm change model presumes that durable change occurs through shifts in the social environment, initially or ultimately, at the grassroots level across local communities. State and community interventions unite a range of integrated programmatic activities, including local and statewide policies and programs, chronic disease and tobacco-related disparity elimination initiatives, and interventions specifically aimed at influencing youth.
Health Communication Interventions	**AN EFFECTIVE STATE HEALTH COMMUNICATION INTERVENTION** should deliver strategic, culturally appropriate, and high-impact messages in sustained and adequately funded campaigns integrated into the overall state tobacco program effort. Traditional health communication interventions and countermarketing strategies employ a wide range of efforts, including paid television, radio, billboard, print, and web-based advertising at the state and local levels; media advocacy through public relations efforts, such as press releases, local events, media literacy, and health promotion activities; and efforts to reduce or replace tobacco industry sponsorship and promotions. Innovations in health communication interventions include more focused targeting of specific audiences as well as fostering message development and distribution by the target audience through appropriate channels.
Cessation Interventions	**INTERVENTIONS TO INCREASE CESSATION** encompass a broad array of policy, system, and population-based measures. System-based initiatives should ensure that all patients seen in the health care system are screened for tobacco use, receive brief interventions to help them quit, and are offered more intensive counseling services and FDA-approved cessation medications. Cessation quitlines are effective and have the potential to reach large numbers of tobacco users. Quitlines also serve as a resource for busy health care providers, who provide the brief intervention and discuss medication options and then link tobacco users to quitline cessation services for more intensive counseling. Optimally, quitline counseling should be made available to all tobacco users willing to access the service.

Source: Centers for Disease Control and Prevention, 2007. Best Practices for Comprehensive Tobacco Control Programs.

TABLE **5.7** CDC Best Practice Program Components

Surveillance and Evaluation	**STATE SURVEILLANCE** is the process of monitoring tobacco-related attitudes, behaviors, and health outcomes at regular intervals. Statewide surveillance should monitor the achievement of overall program goals. Program evaluation is used to assess the implementation and outcomes of a program, increase efficiency and impact over time, and demonstrate accountability. A comprehensive state tobacco control plan-with well-defined goals; objectives; and short-term, intermediate, and long-term indicators-requires appropriate surveillance and evaluation data systems. Collecting baseline data related to each objective and performance indicator is critical to ensuring that program-related effects can be clearly measured. For this reason, surveillance and evaluation systems must have first priority in the planning process.
Administration and Management	**EFFECTIVE TOBACCO PREVENTION AND CONTROL PROGRAMS** require substantial funding to implement, thus making critical the need for sound fiscal management. Internal capacity within a state health department is essential for program sustainability, efficacy, and efficiency. Sufficient capacity enables programs to plan their strategic efforts, provide strong leadership, and foster collaboration between the state and local tobacco control communities. An adequate number of skilled staff is also necessary to provide or facilitate program oversight, technical assistance, and training.

Source: Centers for Disease Control and Prevention, 2007. Best Practices for Comprehensive Tobacco Control Programs.

GOALS • OBJECTIVES • STRATEGIES

GOAL 1

Substantially reduce tobacco use and exposure to secondhand smoke by high-risk Maryland adults and youth.

OBJECTIVE 1

By 2015, adopt and implement statewide and local public policies that combat tobacco-industry marketing strategies used to promote and sustain the use of existing and emerging tobacco products.

STRATEGIES

1. **AMEND MARYLAND'S DEFINITION OF "CIGARETTES"** to include so-called "brown cigarettes" now classified as little cigars.
2. **REQUIRE THAT LICENSED TOBACCO RETAILERS** (a) display effective health warnings about the use of tobacco products; (b) display information on where to get help if you want to quit using tobacco; (c) ban so-called "power walls" (large display of tobacco products and ads) at all licensed tobacco outlets; and (d) ban the distribution of "free samples" of all tobacco products.
3. **ESTABLISH A STATEWIDE CIVIL FRAMEWORK** that does not pre-empt existing local civil frameworks that are at least as stringent for the purpose of enforcing Maryland's restrictions on the sale and distribution of tobacco products to minors, and require a photo identification check consistent with existing Food and Drug Administration (FDA) requirements that does not pre-empt local civil frameworks.
4. **STRENGTHEN TOBACCO-LICENSURE LAWS** so repeated violations on the sale of tobacco to minors result in mandatory suspension/revocation of licenses to sell tobacco products.
5. **ADOPT STATE AND LOCAL POLICIES** that restrict the sale, advertising, and promotion of tobacco products by (a) prohibiting the sale of menthol and any other flavored tobacco products; (b) require sale of non-premium cigars in packages of at least five cigars; and (c) adopt additional restrictions on the time, manner, and place of tobacco sales consistent with the First Amendment and in support of this objective.

OBJECTIVE 2

By 2015, reduce current tobacco use by 10%* among:

- **Maryland adults who do not have a four-year college degree to 14.5% (2008 Baseline: 16.1%)**
  Source: Maryland Adult Tobacco Survey.
- **Maryland high school youth to 21.8% (2008 Baseline: 24.2%)**
  Source: Maryland Youth Tobacco Survey.

STRATEGIES

1. **EXPLORE AN INCREASE OF THE EXCISE TAX ON CIGARETTES** and all other tobacco products by an amount that corresponds to a 10% reduction in tobacco use by 2015, based on evidence cited in the Community Guide to Preventive Services. It is recommended that:
   - Each increase is in an amount of no less than the equivalent of $1.00 per pack of 20 cigarettes.
   - All other tobacco products are taxed at an equivalent rate.
   - No discounts on excise tax rates are available for any reason.
2. **IMPLEMENT AND SUSTAIN EVIDENCE-BASED HEALTH COMMUNICATION INTERVENTIONS** through the Counter-Marketing and Media Component of the Tobacco Program in accordance with CDC recommendations, targeting high-risk youth and adult populations.
3. **ENSURE MEANINGFUL ONGOING ACCESS** to the Maryland Tobacco Quitline and other tobacco-use cessation counseling and widely promote such services. Support services through nicotine replacement therapy and/or pharmacotherapy. Provide coverage of services and therapies for all Maryland tobacco users through privately and publicly sponsored health insurance and direct provision of services for those without health insurance.
4. **ENGAGE WITH COLLEGE AND UNIVERSITY** administrators to ensure that all school campuses are tobacco-free at all times and that tobacco use by youth or adults is prohibited while engaged with all school-related activities.
5. **ADOPT POLICIES IN MARYLAND HOSPITALS** to provide inpatient counseling and treatment for patients that use tobacco.

**This target was developed based upon the recommendations by the Governor's Task Force to End Smoking in Maryland (1999) and updated by the Tobacco-Use Prevention/Cessation and Lung Cancer committee.*

6 **PROMOTE AND ENHANCE THE STATEWIDE AND LOCAL ENFORCEMENT** of Maryland's restrictions on the sale of tobacco products to youth under 18 years of age.

7 **IMPLEMENT EVIDENCE-BASED PUBLIC HEALTH MESSAGING** that increases the demand for tobacco cessation and promotes awareness of the availability of cessation services.

OBJECTIVE 3

By 2015, increase the percentage of youth not exposed to secondhand smoke indoors and in motor vehicles by 10%* from 2008 rates to reach the following targets:

- **Indoors: 77.6% (2008 Baseline: 70.6%)**
- **Motor vehicles: 79.6% (2008 Baseline: 72.4%)**

Source: Maryland Adult Tobacco Survey.

STRATEGIES

1 **ADOPT STATE AND LOCAL POLICIES** that prohibit the smoking of tobacco products inside multi-unit housing (including townhouses and rowhouses sharing common walls) in Maryland.

2 **ADOPT STATE POLICIES** that prohibit the smoking of tobacco products inside motor vehicles when young children who are required by state law to be in child-safety restraint seats are present in the vehicle.

3 **ADOPT STATE AND LOCAL POLICIES** that prohibit the smoking of tobacco products inside of any daycare facility (including private homes licensed as such) at all times, and regardless of whether children are present.

4 **INCREASE AWARENESS** of the health dangers from secondhand and third-hand smoke, and encourage voluntary adoption of smoke-free rules in all households.

5 **PROMOTE THE CESSATION OF TOBACCO USE,** ensure access to the Maryland Tobacco Quitline and other cessation services, and promote awareness of the dangers of secondhand smoke and available cessation services.

**This target was developed based upon the recommendations by the Governor's Task Force to End Smoking in Maryland (1999) and updated by the Tobacco-Use Prevention/Cessation and Lung Cancer committee.*

GOAL 2

Implement the CDC's Best Practice recommendations (2007) for Maryland's Comprehensive Tobacco Control Program.

OBJECTIVE 1

If funding for Maryland's Tobacco Comprehensive Control Program remains at FY 2011 levels, focus efforts on the most impactful, evidence-based programs.

STRATEGIES

1 **INCREASE REIMBURSEMENT** from insurance providers and third party payers to ensure ongoing access to services provided by Maryland Tobacco Quitline (1-800-QUIT-NOW).

2 **IMPLEMENT A SUSTAINED,** effective statewide health communication Counter-Marketing and Media Component intervention.

3 **BROADEN THE SCOPE** of Maryland's youth and adult surveys beyond tobacco to include physical activity, nutrition, obesity, and use of other substances such as alcohol and drugs in order to maximize resources and integrate surveillance efforts of risk factors for cancer and other chronic diseases. Accurate and reliable county-level data should be available to local health departments for use in community health indicator reports.

4 **AWARD COMPETITIVE GRANTS** to organizations and local health departments that use best practices to target high-risk populations and educate physicians and other healthcare providers.

5 **ENSURE THAT GRANTS** targeting high-risk youth and young adults include only evidence-based or Centers for Disease Control and Prevention recommended interventions.

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