TOBACCO-USE PREVENTION AND CESSATION AND LUNG CANCER
**Committee Members**

Kari Appler (Chairperson) - Smoke Free Maryland
Dawn Berkowitz, MPH - Center for Health Promotion and Tobacco-Use Prevention, Maryland Department of Health & Mental Hygiene
Marsha Bienia, MBA - Center for Cancer Surveillance and Control, Maryland Department of Health & Mental Hygiene
Albert Blumberg, MD - Greater Baltimore Medical Center
Mark Breaux - Smoke Free Maryland
Christine Crabbs - North Arundel Hospital
Kathleen Dachille, JD - Center for Tobacco Regulation, University of Maryland School of Law
Michaeline Fedder, MA - American Heart Association
Patricia N. Horton, RN, MBA - Montgomery County Health Department
Soula Lambropoulos, MS - Baltimore City Health Department
Ruth Maiorana - Harford County Health Department
Sherry McCammon - American Cancer Society
Steve Peregoy - American Lung Association
Glenn Schneider, MPH - Smoke Free Howard County
Debra Southerland - American Lung Association
Joan Stine, MHS, MS - Center for Health Promotion and Tobacco-Use Prevention, Maryland Department of Health & Mental Hygiene
Michael Strande, JD - Legal Resource Center for Tobacco Regulation, Litigation, and Advocacy

**Chapter Writers**

Diane Dwyer, MD - Center for Cancer Surveillance and Control, Maryland Department of Health & Mental Hygiene
Robert Fiedler - Center Health Promotion and Tobacco-Use Prevention, Maryland Department of Health & Mental Hygiene
TOBACCO-USE PREVENTION, CESSATION, AND LUNG CANCER

Tobacco-use prevention and cessation are central to comprehensive cancer control in Maryland. However, the full impact of tobacco use reaches far beyond its impact on cancer. Tobacco use causes the premature death from all tobacco-related diseases (including cancer and heart and lung disease) of more adults each year in Maryland than all the lives lost to terrorism on September 11, 2001. The annual death toll from tobacco-related disease in Maryland exceeds the state’s combined combat death toll from World War II and the Korean and Vietnam Wars (Figure 5.1).1

Currently, tobacco use is estimated to cost the Maryland economy in excess of $3 billion annually, including $1.5 billion in added health care costs. The cost of providing additional tobacco-related health care services to Maryland residents adds an estimated $552 to the average Maryland household’s combined state and federal income tax bill.2,3

The human and economic toll that tobacco use exacts from Maryland residents will only decline when fewer Marylanders choose to use tobacco products. From both a health and economic perspective, it is imperative that Maryland continues to take steps to reduce tobacco use.

Burden of Tobacco-Related Disease

Tobacco use has been found to be a cause of cancer, heart disease, and respiratory disease. The Centers for Disease Control and Prevention (CDC), using data from 1999, conservatively estimates that at least 6,800 adult Maryland residents die prematurely each year as a result of cigarette smoking (“smoking”),4 42% of which are due to cancer. The number of people who die prematurely as a result of the use of tobacco products other than cigarettes, such as chewing tobacco, pipes, and cigars, are not included in this estimate. Likewise, premature deaths resulting from exposure to second-hand smoke are not included in this estimate. More Marylanders are dying prematurely each year as a result of smoking cigarettes than are dying from the combined effects of alcohol, drugs, homicide, suicide, AIDS, and accidents (Figure 5.1).3 In addition, 18 Maryland infants are estimated to die each year as a result of their mothers smoking during pregnancy.

Smoking and tobacco use are associated with a number of different cancer types and sites.4 Table 5.1 shows the proportion of cancers at various sites that are attributable to smoking in Maryland, by sex and age. For example, 89% of deaths from cancer of the lung, bronchus, or trachea in men 35–64 years of age are estimated to be attributable to smoking. Given the number of cancers of these sites reported in Maryland
in 1999, it is estimated that 2,871 deaths in people 35 years and older from these cancers were attributable to tobacco use, of which 2,278 (79%) were cancer of the lung, bronchus, or trachea (Table 5.2).

**Lung Cancer**

Lung cancer is the leading cause of cancer deaths in both men and women in Maryland, accounting for 28.6% of all cancer deaths between 1995 and 1999 (Figure 1.5, Chapter 1). Figures 1.6 and 1.7, also in Chapter 1, show lung cancer deaths rising rapidly to become the major cause of cancer mortality among men in the nation, and rising thereafter among women. The death rate peaked for men in 1990; the rate of increase in women slowed in the 1990s.

Lung cancer, or primary cancer of the lung and bronchus, is comprised of two major categories: small cell carcinoma (accounting for 20%–30% of lung cancer) and non-small cell carcinomas. Non-small cell lung cancers include squamous cell carcinoma, adenocarcinoma, and large cell carcinoma (accounting for 30%–40%, 40%–50%, and 10%–15% of all lung cancers, respectively). Each type has different patterns of spread, treatment, and prognosis. Lung cancer typically spreads within the chest and to lymph nodes of the chest, and also to distant sites, predominantly the brain, bone, liver, adrenal gland, and the other lung.

According to Maryland Cancer Registry staging, lung cancer is considered “localized” if it consists of single or multiple tumors confined to one lung and/or one main stem bronchus. “Regional” tumors are either locally invasive or have spread to lymph nodes within the chest. “Distant” lung cancers have spread more widely in the chest or to distant lymph nodes or other organs. From 1992 to 1999, the overall five-year survival rate for lung cancer was 14.9% (48.5% for local stage, 21.7% for regional stage, and 2.5% for distant staged tumors). The survival rate for whites exceeds that of blacks (15.1% vs. 12.4%). Five-year survival rates are higher for non-small cell cancer than for small cell cancer of the lung (all stages 16.3% vs. 6.4%; SEER, 1992–1998).
### Table 5.1
**Proportion of Cancer Deaths Attributable to Smoking by Site in Maryland, 1999 (Smoking Attributable Fractions)**

<table>
<thead>
<tr>
<th>Cancer Site</th>
<th>MALES</th>
<th></th>
<th>FEMALES</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Age 35-64*</td>
<td>Age 65+</td>
<td>Age 35-64*</td>
<td>Age 65+</td>
</tr>
<tr>
<td>Lip, oral cavity, pharynx</td>
<td>76%</td>
<td>68%</td>
<td>53%</td>
<td>45%</td>
</tr>
<tr>
<td>Esophagus</td>
<td>71%</td>
<td>70%</td>
<td>64%</td>
<td>55%</td>
</tr>
<tr>
<td>Pancreas</td>
<td>26%</td>
<td>16%</td>
<td>28%</td>
<td>23%</td>
</tr>
<tr>
<td>Larynx</td>
<td>83%</td>
<td>80%</td>
<td>77%</td>
<td>72%</td>
</tr>
<tr>
<td>Lung, bronchus, or trachea</td>
<td>89%</td>
<td>86%</td>
<td>76%</td>
<td>70%</td>
</tr>
<tr>
<td>Cervix uteri</td>
<td>-</td>
<td>-</td>
<td>13%</td>
<td>9%</td>
</tr>
<tr>
<td>Urinary bladder</td>
<td>47%</td>
<td>43%</td>
<td>31%</td>
<td>29%</td>
</tr>
<tr>
<td>Kidney and renal pelvis</td>
<td>39%</td>
<td>35%</td>
<td>6%</td>
<td>4%</td>
</tr>
</tbody>
</table>

*The number of deaths among persons less than 35 years of age was too small to attain statistical significance.
Source: SAMMEC.

### Table 5.2
**Total Cancer Deaths by Select Site and Age Group in Maryland, 1999**

<table>
<thead>
<tr>
<th>Site</th>
<th>Total deaths, all ages</th>
<th>Deaths among those age 35+ estimated to be attributable to smoking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral Cavity and pharynx</td>
<td>144</td>
<td>140</td>
</tr>
<tr>
<td>Esophagus</td>
<td>237</td>
<td>237</td>
</tr>
<tr>
<td>Pancreas</td>
<td>557</td>
<td>557</td>
</tr>
<tr>
<td>Larynx</td>
<td>90</td>
<td>90</td>
</tr>
<tr>
<td>Lung, bronchus, and trachea*</td>
<td>2,842</td>
<td>2,837</td>
</tr>
<tr>
<td>Cervix uteri</td>
<td>77</td>
<td>74</td>
</tr>
<tr>
<td>Urinary bladder</td>
<td>228</td>
<td>226</td>
</tr>
<tr>
<td>Kidney and renal pelvis</td>
<td>171</td>
<td>169</td>
</tr>
<tr>
<td>Total</td>
<td>4,346</td>
<td>4,330</td>
</tr>
</tbody>
</table>

*The 2,842 deaths include five or fewer deaths from cancer of the trachea in addition to the lung and bronchus cancer deaths (the data-use policy of MCR/DHMH does not permit specification of numbers of cases less than or equal to five cases).
Source: Maryland Cancer Registry; SAMMEC.
Risk Factors for Lung Cancer

Smoking
Conceptually, lung cancer can be described as a multi-step developmental process occurring over the entire lung surface where multiple independent cancerous lesions may be developing. Tobacco smoke contains carcinogens including benzene, nitrosamines, vinyl chloride, arsenic, and polynuclear aromatic hydrocarbons (PAHs), including the classic carcinogen benzo[a]pyrene (BaP), and the nicotine-derived tobacco-specific nitrosamine, 4-(methylnitrosamino)-1-(3-pyridyl)-1-butane (NNK), in addition to toxins and irritants (such as carbon monoxide, nicotine, hydrogen cyanide, and ammonia). Carcinogens cause genetic damage that leads to lung cancer. When a person inhales tobacco smoke, carcinogens come in direct contact with surfaces of the mouth, trachea, and lung, and may be also absorbed into the blood and circulated through the body. Additionally, saliva that contains carcinogens from smoke gets swallowed and carcinogens come in contact with the esophagus, stomach, and intestines. People who smoke are likely to have multiple premalignant lesions within the lungs.

Tobacco smoking is estimated to cause 90% of lung cancer in men and 78% of lung cancer in women; cigar and pipe smoking have also been associated with increased lung cancer risk. The risk of lung cancer and smoking is dose-dependent, i.e., dependent on the duration of smoking, the number of cigarettes smoked per day and the inhaling pattern. For example, heavy smokers (more than 40 cigarettes per day for several years) have a 20 times greater risk of getting lung cancer than non-smokers. Eighty percent of lung cancers occur in smokers. A 30% to 50% reduction in lung cancer mortality risk has been noted after 10 years of cessation.

The risk of lung cancer from cigar smoking is less than from cigarette smoking; however, lung cancer risk from moderately inhaling smoke from five cigars a day is comparable to the risk from smoking up to one pack of cigarettes a day. The prevalence of tobacco use in Maryland adults and youth is described in detail later in the chapter.

Secondhand (or environmental) tobacco smoke
Secondhand tobacco smoke contains the same chemicals but in lower concentrations (1%–10% depending on the chemical) than those to which the smoker is exposed. Secondhand smoke has been found to be a risk factor among nonsmokers, increasing the risk of tobacco-related cancer by 20% (a relative risk of 1.2).

Other Exposures
Radiation (such as uranium), occupational exposure to nickel, chromates, coal, mustard gas, arsenic, beryllium, and iron, and occupational exposures (among newspaper workers, African gold miners, and halo-ether workers, for example) increase the risk of lung cancer. Asbestos causes lung cancer and mesothelioma (cancer of the pleura or surface membrane of the lung). Exposure to asbestos is synergistic with smoking exposure in increasing an exposed person’s risk of lung cancer, but not of mesothelioma. In miners, radon (independently and increasingly with smoking) is an established lung cancer risk factor. Epidemiologic data on radon in the home as a risk factor for lung cancer have been preliminary and limited. However, the lifetime relative risk for residing in a home at the Environmental Protection Agency action level of four picocuries per liter has been estimated at about 1.4 for smokers and 2.0 for nonsmokers.

Age
In 1999, less than 1% of lung cancer cases in Maryland were diagnosed in people younger than 30 years of age. This rate increases markedly with each decade after age 30. Among smokers, however, increasing age is also correlated with an increasing exposure to smoke.

Prior Lung Cancer
The lifetime risk of second primary lung cancers in people with early stage lung cancer is 20%–30%.

Burden of Lung Cancer in Maryland
Lung cancer is the leading cause of cancer deaths in both men and women in Maryland, accounting for 28.6% of all cancer deaths between 1994 and 1998 (see Figure 1.5, Chapter 1). Lung cancer is the third leading cause of new cancer cases in Maryland after prostate and breast cancer. (See Figure 1.5 in Chapter 1.) In 1999, 3,447 people in Maryland were diagnosed with lung cancer (71.6/100,000 of the age-adjusted rate) and 2,841 people died of lung cancer (59.4/100,000; significantly higher than the U.S. rate of 56.0/100,000). Table 5.3.

Maryland’s death rate from lung cancer in 1999 was 18th highest among the states and the District of Columbia. Figure 5.2 shows the trend in the cases and deaths from 1995–1999. During this period, Maryland had an annual 3.3% decrease in incidence and a 2.2%
decrease in mortality rate. Over this same period, the incidence among white and black women has remained essentially stable while the rate among men, especially black men, has decreased markedly (from 144.9/100,000 to 105.2/100,000; Figure 5.3). Overall, women have just over half the rate of lung cancer as men. Mortality trends have similarly shown the greatest declines among black men; however, the mortality rate of black men remains over twice the rate in white or black women (103.3/100,000 compared to 45/100,000). Figure 5.4.

Incidence and mortality rates vary markedly by age, and Maryland’s incidence rates exceed the U.S. rates at all ages (Figure 5.5). Rates peak among men at ages 75–84 and among women at ages 70–79 (Figure 5.6); black men have the highest rates at all ages. Figure 5.7 shows the lung cancer mortality rates from 1995–1999 in Maryland’s 24 jurisdictions. Montgomery County had a rate statistically significantly lower than the U.S. rate while 12 jurisdictions in the eastern half of the state had rates that were statistically significantly higher than the U.S. rate.

### Table 5.3
Lung Cancer Incidence and Mortality by Sex and Race in Maryland and the United States, 1999

<table>
<thead>
<tr>
<th></th>
<th>Incidence 1999</th>
<th>Mortality 1999</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Males</td>
</tr>
<tr>
<td>New Cases (#)</td>
<td>3447</td>
<td>1904</td>
</tr>
<tr>
<td>Incidence Rate</td>
<td>71.6</td>
<td>92.4</td>
</tr>
<tr>
<td>U.S. SEER Rate</td>
<td>63.5</td>
<td>81.1</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>Males</td>
</tr>
<tr>
<td>MD Deaths (#)</td>
<td>2841</td>
<td>1624</td>
</tr>
<tr>
<td>MD Mortality Rate</td>
<td>59.4</td>
<td>81.2</td>
</tr>
<tr>
<td>U.S. Mortality Rate</td>
<td>56.0</td>
<td>77.2</td>
</tr>
</tbody>
</table>

Rates are per 100,000 and age-adjusted to the 2000 U.S. standard population.

**Rates based on cells with 25 or fewer non-zero cases are not presented per DHMH/MCR Data-Use Policy.
Source: Maryland Cancer Registry, 1999; Maryland Division of Health Statistics, 1999; SEER, National Cancer Institute, 1999.

### Figure 5.2
Lung Cancer Incidence and Mortality by Year of Diagnosis and Death in Maryland, 1995–1999

[Graph showing incidence and mortality rates by year of diagnosis or death]

Rates are per 100,000 and age-adjusted to the 2000 U.S. standard population.

Source: Maryland Cancer Registry, 1995-1999; Maryland Division of Health Statistics, 1999; SEER, National Cancer Institute, 1999.
Figure 5.3
Lung Cancer Incidence Rates by Race and Sex in Maryland, 1995–1999

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>WHITE MALE</td>
<td>107.5</td>
<td>108.8</td>
<td>100.3</td>
<td>92.1</td>
<td>90.3</td>
</tr>
<tr>
<td>BLACK MALE</td>
<td>144.9</td>
<td>138.2</td>
<td>123.3</td>
<td>103.2</td>
<td>105.2</td>
</tr>
<tr>
<td>WHITE FEMALE</td>
<td>63.4</td>
<td>64.1</td>
<td>62.9</td>
<td>60.1</td>
<td>58.5</td>
</tr>
<tr>
<td>BLACK FEMALE</td>
<td>36.3</td>
<td>36.6</td>
<td>35.8</td>
<td>54.6</td>
<td>55.0</td>
</tr>
</tbody>
</table>

Rates are per 100,000 and age-adjusted to the 2000 U.S. standard population.

Figure 5.4
Lung Cancer Mortality Rates by Race and Sex in Maryland, 1995–1999

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>WHITE MALE</td>
<td>84.5</td>
<td>85.1</td>
<td>80.8</td>
<td>82.9</td>
<td>78.2</td>
</tr>
<tr>
<td>BLACK MALE</td>
<td>119.8</td>
<td>124.1</td>
<td>111.4</td>
<td>104.5</td>
<td>103.3</td>
</tr>
<tr>
<td>WHITE FEMALE</td>
<td>47.9</td>
<td>48.3</td>
<td>45.6</td>
<td>45.0</td>
<td>45.2</td>
</tr>
<tr>
<td>BLACK FEMALE</td>
<td>44.4</td>
<td>44.6</td>
<td>45.0</td>
<td>49.4</td>
<td>45.8</td>
</tr>
</tbody>
</table>

Rates are per 100,000 and age-adjusted to the 2000 U.S. standard population.
Figure 5.5
Lung Cancer Age-Specific Incidence Rates in Maryland and the United States, 1995–1999

Rates are per 100,000 and age-adjusted to the 2000 U.S. standard population.
Figure 5.6
Lung Cancer Age-Specific Incidence Rates by Race and Sex in Maryland, 1995–1999

Rates are per 100,000 and age-adjusted to the 2000 U.S. standard population.
In 1999, 21% of Maryland lung cancer cases were reported as local stage at the time of diagnosis, 26.7% were regional stage, 35.8% were distant stage, and 16.6% were unstaged. Both blacks and whites were less likely to have distant stage disease at the time of diagnosis and more likely to have localized or regional disease compared to U.S. SEER rates (Figure 5.8). However, among Marylanders with lung cancer, blacks are more likely to have their lung cancer diagnosed in the regional or distant stage (Figure 5.9). Survival data are not available for Maryland cases.

**Disparities**

- At all ages, black men have the highest rate of new cases of, and deaths from, lung cancer.
- Black men had a sharper decline in the incidence of lung cancer between 1995–1999 than white men or black and white women, but their rate of lung cancer remains the highest of these groups.
- Black men and women were more likely to be diagnosed with distant-stage lung cancer in Maryland than their white counterparts between 1992 and 1997.

**Primary Prevention of Lung Cancer**

The majority of lung cancers could be prevented through “primary prevention,” that is, prevention and cessation of tobacco use. In addition, primary prevention of lung cancer includes policies that reduce exposure to secondhand smoke. Discussion of interventions that decrease exposures to other chemicals that are associated with lung cancer risk (e.g., radon, asbestos, and occupational exposures) is beyond the scope of this chapter.

**Chemoprevention and Reversal of Premalignancy**

Investigation of chemopreventive agents and agents that can reverse premalignant changes in the lungs of smokers is under research investigation at this time. Because a high level of consumption of fruits and vegetables has been associated with lower risk of lung cancer, even when controlling for smoking, trials of supplementation have been conducted. Two randomized, controlled clinical trials have studied beta-carotene supplements for chemoprevention of lung cancer. They have shown that pharmacological doses (20 mg/day or greater) of beta-carotene supplementation may, in fact, increase lung cancer incidence and mortality among high-intensity smokers (one or more packs per day).
**Figure 5.8**
Lung Cancer Distribution of Stage at Diagnosis by Race in Maryland and the United States, 1992–1997

![Bar chart showing lung cancer distribution by race and stage in Maryland and the United States from 1992 to 1997.](chart1)


**Figure 5.9**
Lung Cancer Distribution of Stage at Diagnosis by Race and Sex in Maryland, 1992–1997

![Bar chart showing lung cancer distribution by race, sex, and stage in Maryland from 1992 to 1997.](chart2)

Screening for Lung Cancer

Current evidence does not support lung cancer screening by chest X-ray or sputum cytology. Randomized trials have shown that these tests do not lead to a reduction in lung cancer mortality. Low dose spiral computerized tomography (CT) of the chest or “spiral CT” is available now commercially, although it has not been shown to decrease mortality from lung cancer. It is currently undergoing comparison to chest X-ray in the National Lung Cancer Screening Trial to determine whether it will lower mortality. Screening tests for lung cancer are not recommended by the American Cancer Society, the U.S. Preventive Services Task Force, the National Cancer Institute, or the American College of Radiology; all strongly endorse smoking cessation for prevention.

Other Tobacco-Related Cancers

In addition to lung cancer, there are a number of other cancers that can be attributed to tobacco use (Table 5.1). Table 5.2 shows the total number of these cancer deaths reported in Maryland in 1999, the number who were 35 years of age or older at the time of death, and the number that are estimated to be attributable to tobacco use. There were a total of 4,330 deaths in Marylanders 35 or over due to these cancers, 2,871 of which were estimated to be attributable to smoking. A portion of cancers of the esophagus, pancreas, larynx, bladder, and kidney are attributable to smoking (Table 5.1), but at this time primary prevention through tobacco-use prevention and cessation, and not screening, is recommended to reduce the rates of these cancers.

Tobacco Use by Maryland Adults

Maryland’s first comprehensive study of tobacco use by adults in the state occurred in the fall of 2000 when the Maryland Adult Tobacco Survey (MATS-00) was conducted. For the first time, specific estimates of adult tobacco use by county became available to policy makers and program personnel. Unless otherwise stated, the statistics in this section are from the 2000 MATS.

Any Tobacco Use

Tobacco is used in one form or another by 21.8% (±0.95%) of Maryland adults. Considerable variation in the prevalence of tobacco use was noted, ranging from a low of 14.3% (±2.45%) of adults in Montgomery County, to a high of 31.4% (±3.45%) of adults in Baltimore City. Over 842,000 Maryland adults use some form of tobacco product.

Cigarette Smoking

Cigarettes are the most commonly used tobacco product, with 17.5% (±0.85%) of Maryland adults reporting they were current cigarette smokers. The percent of adults who are current smokers ranges from a low of 9.3% (±2.00%) in Montgomery County to a high of 28.3% (±3.40%) in Baltimore City. The majority of adults report they started smoking while still under the age of 18.

Other Tobacco Products

In addition to cigarettes, Maryland adults reported using smokeless tobacco (1.1% ±0.20%) and other tobacco products (6.8%) such as pipes, cigars, bidis, and kreteks.

Tobacco and Race/Ethnicity

In Maryland, there does not appear to be any statistically significant difference in the use of tobacco products between African Americans, Hispanics, or whites (Figure 5.10). Although the data suggest that Asian Americans use tobacco at significantly lower rates than do the other racial/ethnic groups, this may be due to the fact that relatively few Asian Americans participated in that survey.

Tobacco and Education /Income

Smoking is related to socioeconomic status. Figures 5.11 and 5.12 show smoking rates among adults in Maryland by highest educational attainment and by self-reported annual income. Those who did not complete high school are almost four times as likely to smoke as Maryland adults who are college graduates (34.3% vs. 8.9%). Those who reported that their income was less than $25,000 were twice as likely to smoke as those who reported income of $50,000 and higher (27.5% vs. 13.5%).

Tobacco and Gender

In Maryland, 27.7% of adult males report using some form of tobacco product, and 19.5% report smoking cigarettes. In comparison, only 16.5% of females report using tobacco products, with 15.7% reporting cigarette smoking.

Tobacco Use by Maryland Youth

Maryland’s first comprehensive study of tobacco use by youth in the state occurred in the fall of 2000 when the
Figure 5.10
Maryland Adults Who Smoked Cigarettes in the Past 30 Days by Race/Ethnicity, 2000


Figure 5.11
Maryland Adults Who Smoked Cigarettes in the Past 30 Days by Highest Education Attainment, 2000

Maryland Youth Tobacco Survey (MYTS-00) was conducted. For the first time, specific estimates of youth tobacco use by county became available to policy makers and program personnel. Unless otherwise stated, the statistics in this section are from the 2000 MYTS.

Any Tobacco Use

An estimated 21.4% (±1.25%) of underage Maryland youth attending public middle and high schools use some form of tobacco product. The prevalence of underage tobacco use varies considerably among communities, from a low of 16.6% (±4.3%) in Montgomery County to a high of 33.9% (±4.25%) in Somerset County. Over 87,000 underage Maryland youth use some form of tobacco product.

Cigarette Smoking

Cigarettes are the single most popular tobacco product with Maryland youth. Overall, 16.3% (±1.1%) of Maryland youth attending public middle and high schools reported they had used cigarettes in the past 30 days. Like the adult population, the prevalence of cigarette smoking among middle and high school youth varies considerably across the state, from a low of 10.6% (±2.55%) in Prince George’s County to a high of 29.2% (±4.65%) in Somerset County.

Smoking by Grade

Smoking rates increase linearly by grade (Figure 5.13) from 2.7% among 6th graders to an overall cigarette smoking prevalence among 12th graders in Maryland of 30.8%. The highest county-specific rate of 49.5% was among 12th graders in Somerset County.

Other Tobacco Products

Maryland youth, like adults, also use a variety of tobacco products other than cigarettes. The rate for the use of smokeless tobaccos, such as chewing tobacco, snuff, or dip, is a relatively low 1.1% statewide. However, use can be as high as 6% overall, and was 15.1% among 12th graders in Garrett County.

Tobacco and Race/Ethnicity

Tobacco use among Asian-American youth is 19.7%, among African-American youth it is 18.6%, among Hispanic youth it is 23.8%, and among white youth it is 23.8%.
Tobacco and Gender

There does not appear to be a significant difference in tobacco use by sex among youth; an estimated 23.6% of males use tobacco products, compared to 20.3% of females.

Exposure to Secondhand Smoke

Exposure to secondhand smoke subjects individuals to a substance which poses a significant health hazard. The overwhelming scientific consensus is that secondhand smoke causes lung cancer in non-smokers, is responsible for lung infections among adults and children, and aggravates, if not causes, a variety of respiratory conditions in children, including asthma.\(^{36}\)

Since 1993, Maryland has restricted smoking in the workplace with a few notable exceptions. Smoking is still permitted without any requirement for a separate enclosed space or ventilation in most establishments where alcohol is served. Unless otherwise stated, the statistics in this section are from the MATS and MYTS.

Youth

Overwhelming numbers of Maryland youth believe that being exposed to the smoke from other people’s cigarettes is harmful to their health (almost 87% of middle school youth and over 88% of high school youth). Notwithstanding this belief, a significant proportion report being exposed to secondhand smoke at home and in the community. When asked if they had recently been in a room or a car while someone was smoking, over 50% of middle school youth and 68% of high school youth reported that they had.

Although only 17.5% of Maryland adults report that they smoke cigarettes, 42% of Maryland middle and high school youth report that they live with adult smokers. This creates a significant potential for exposure to secondhand smoke. Additionally, it creates a false impression among youth that the prevalence of cigarette smoking in the adult population is much higher than the data indicates.

Adults

In excess of 88% of Maryland adults believe that exposure to secondhand smoke can be harmful to their
health. Almost 92% believe that such exposure can be harmful to the health of children. A significant percentage of these adults take these concerns to heart, with 80% reporting that their homes had been smoke-free during the previous week.

Unlike a home, where rules about smoking are totally under the control of a person or family, most Maryland adults must rely on employers’ smoking policies, governmental restrictions, and compliance to prevent being exposed to secondhand smoke. Overall, 82% of adults report that smoking is prohibited at their worksite and almost 76% of working adults report that no smoking occurs indoors at their workplace.

Maryland’s existing restrictions on smoking in the workplace provide the greatest protection to those with the highest incomes and education. Over 84% of working adults with a college degree report that smoking does not occur in their workplace as compared to the same reporting by 63% of those who had not graduated high school. Similarly, over 81% of those earning $50,000 a year or more report that no smoking occurs in their workplace as compared to the 65% of those earning less than $25,000 a year.

**Youth Access**

Every state, including Maryland, prohibits the sale of tobacco products to youth who are under 18 years of age (even older in some jurisdictions). Tobacco retailers assume a responsibility to the community they serve to comply with these community standards regarding tobacco use. The obligation to sell tobacco products responsibly is not a new one. Maryland’s prohibition on the sale of tobacco products to minors has been in existence since the 1800s. Given the statute prohibiting the sale of tobacco products to minors and its long history, all Maryland retailers know, or should know, that they cannot legally sell tobacco to persons under the age of 18.

What is new, however, is the evidence and consensus on the dangers of tobacco use, the addictive nature of tobacco products, evidence of a history of marketing that targets underage youth, and a realization of the critical importance of reducing underage initiation of tobacco use.

**A Changing Retail Culture**

Maryland and most other states began random inspections of tobacco retailers during Federal Fiscal Year 1997 (FFY 97) to determine the degree of retailer compliance with the obligation for responsible retailing. These “SYNAR” inspections are conducted annually under federal mandate.

As a condition to receiving its Substance Abuse Federal Block Grant, Maryland is required by federal law to establish that (1) it has laws in place prohibiting the sale and distribution of tobacco products to persons under 18 and (2) that it is enforcing those laws effectively. States are to achieve a compliance rate of at least 80 percent by FY 2003. This requirement is commonly referred to as the
“SYNAR Amendment,” named after Oklahoma’s former U.S. Congressman Mike Synar, who sponsored the federal legislation.

When these inspections began in 1997, Louisiana reported the lowest rate of retailer compliance (27.3%). In Maryland, only 54.3% of retailers were compliant that year. Only four states had compliance rates above 80%.

The latest data (FFY 02) show a dramatic change in retailers’ attitudes toward their obligation of responsible tobacco retailing. Today, Wisconsin has the lowest compliance rate (66.3%) and 38 states (and the District of Columbia) have compliance rates above 80%. Maryland has improved its compliance rate to 75%. However, Maryland still lags behind the nation: in FFY 2002, Maryland’s 75% compliance was the fourth lowest compliance rate in the nation as shown in Figure 5.14 on previous page.37

Cessation of Tobacco Use

If Maryland is to achieve its vision of reducing tobacco use by 50%, it must not only succeed in reducing the number of young people that initiate smoking behaviors, it must also assist those who want to quit smoking. There is ample evidence that substantial numbers of Marylanders want to free themselves from their addiction to nicotine.

Smokers Want to Quit

In the fall 2000 MATS and MYTS baseline tobacco surveys, over one-half of current adult smokers stated that they would like to quit in the next six months. More than half reported that they had already tried, unsuccessfully, to quit during the previous 12 months. The top five reasons given for wanting to quit were: (1) to improve physical fitness, (2) concern about the health risks associated with smoking, (3) the health problems associated with smoking, (4) bad aesthetics (taste/looks/smell), and (5) the cost of tobacco.

A large number of Maryland youth who smoke want to quit too. Almost 52% of middle school youth and 49% of high school youth who currently smoke say that they would like to quit and over 66% of middle school and 59% of high school youth report that they have tried to quit smoking.

The benefit of quitting is clear. Cigarette smokers who quit smoking before they turn 50 reduce their chance of dying in the next 15 years by half.38

In the fall of 2000, Maryland was estimated to have a total of 903,458 youth and adults that were current users of at least one tobacco product. If, on average, 50% of tobacco users would like to quit, then Maryland has a potential tobacco-use cessation market of 465,229 individuals. On an annual basis, 10% of all smokers make use of full cessation services (counseling and pharmaceutical aids).39 In Maryland, this translates to an annual demand for full cessation services of approximately 90,000 individuals.

Helping Smokers to Quit

Providing assistance to people who want to quit is neither easy, nor inexpensive. However, smoking-cession is more cost-effective than other commonly provided clinical preventive services such as mammography, colon cancer screening, PAP tests, treatment of mild to moderate hypertension, and treatment of high cholesterol.40-42 The savings in reduced health care costs from the implementation of moderately priced, effective, cessation programs would pay for themselves within three to four years.43

The Centers for Disease Control and Prevention recommends that state action on tobacco-use cessation include the following elements: (1) establishment of population-based counseling and treatment programs such as cessation helplines, (2) adoption of system changes as recommended by the AHCPR-sponsored cessation guidelines, (3) covering treatment for tobacco use under both public and private insurance, and (4) eliminating cost barriers to treatment for underserved populations, particularly the uninsured.44

If Maryland is to succeed in helping those who want to sever their addiction to nicotine, it is critical that it implement these CDC recommendations. Maryland has made a start in this direction, as the state has begun to fund cessation programs in each county and Baltimore City (for a current list of cessation programs see http://www.SmokingStopsHere.org). But it must implement additional measures including a telephone quit/help line, advocating for coverage of cessation counseling by public and private insurance, and providing sufficient funding to meet the demand for cessation services in Maryland.
Current Efforts

The Maryland Department of Health & Mental Hygiene's Tobacco-Use Prevention and Cessation Programs

General Fund: Tobacco-Use Prevention and Cessation Program
Maryland initiated small tobacco-use prevention and cessation efforts in 1992 as part of the state's Cancer Initiative. Today, this program continues to provide resources to local health departments for smoking-cessation services, community organizing, community education, and outreach to minority, low-income, and low-educated populations. In addition, this program provides resources to local school systems for tobacco-use prevention curricula, instruction, staff training, and peer support initiatives like the Students Against Starting Smoking (SASS) clubs.

Federal CDC Grant: National Tobacco Control Program
In 1993 the Centers for Disease Control and Prevention began providing funding to help states build capacity and infrastructure for comprehensive tobacco control, and to promote policy solutions to reduce tobacco use. The grant provides core funding to enhance partnership collaboration, mobilize communities, train community organizations, and conduct surveillance studies and media advocacy initiatives. Today, this grant complements and enhances all statewide efforts by working closely with Smoke Free Maryland (the statewide coalition) on statewide and local policy initiatives, funding grassroots and pilot tobacco projects and providing the necessary training programs for advocates and lay people. Some of the initiatives include policy promotion and training for smoking cessation, mobilizing little league, adult, and minor league sports venues to promote tobacco-free environments and lifestyles, providing training on “best practices” for college tobacco control programs, developing a tobacco control resource center on the campus of a historically black college (University of Maryland Eastern Shore), and supporting the Legal Resource Center efforts to localize policy development.

Cigarette Restitution Fund: Tobacco-Use Prevention and Cessation Program
The purpose of the program is to coordinate the state's use of the Cigarette Restitution Fund to address issues relating to tobacco-use prevention and cessation and to create a lasting legacy of public health initiatives that result in a reduction of tobacco use in the state and otherwise benefit the health and welfare of the state’s residents. The program consists of five components:

Statewide Public Health Component: The purpose of this component is to develop and implement statewide anti-tobacco initiatives that are consistent with the findings and recommendations of the 1999 Governor’s Task Force to End Smoking in Maryland Task Force Report and the recommendations of the Centers for Disease Control and Prevention regarding best practices for comprehensive tobacco control programs as they relate to statewide programs, including programs that support the implementation of the Cigarette Restitutions Fund Program’s Local Public Health Component.

Local Public Health Component: The purpose of this component is to maximize the effectiveness of anti-tobacco initiatives in the state by authorizing local health coalitions to develop and implement tobacco-use prevention and cessation programs in coordination with the DHMH. Funding comes from DHMH Local Tobacco Grants in support of: community-based programs, school-based programs, programs relating to enforcement of tobacco control laws, and cessation programs.

Counter-Marketing and Media Component: The purpose of this component is to coordinate a statewide counter-marketing and media campaign to counter tobacco advertisements and discourage the use of tobacco products.

Surveillance and Evaluation Component: The purpose of this component is to collect, analyze, and monitor data relating to tobacco use and tobacco-use prevention and cessation in the state; measure and evaluate the results of the program, including the results of each component of the program; conduct a baseline tobacco study; and conduct subsequent biennial tobacco studies.

Administrative Component: The purpose of this component is to provide the necessary administrative structure within DHMH for effective management of the program.

Legacy Grant: Youth Empowerment/Tobacco-Use Prevention Program
The American Legacy Foundation, created as a result of the national settlement with the tobacco industry, supports efforts across the nation to reduce tobacco use among youth and young adults. Maryland received
a grant to develop and implement a youth empowerment program to provide youth with the skills and forums needed to take action on their own to reduce tobacco use among their peers. Through this grant, nine youth coalitions are funded through community organizations. These groups conduct tobacco-use awareness and prevention activities in their jurisdictions including public service announcements, presentations at elementary and middle schools, and hosting tobacco-free sports challenges and smoke-free dining nights at local restaurants. Each youth coalition has a representative on a statewide Youth Advisory Board. This board has named Maryland’s American Legacy Foundation program “Teens Rejecting Abusive Smoking Habits (T.R.A.S.H.).” T.R.A.S.H. organizes tobacco control training events for youth at state and local tobacco control conferences, developed a web site (www.marylandtrash.com) to increase awareness of youth tobacco control efforts, and is currently producing a youth cessation tool kit.

**Nongovernmental Tobacco-Use Prevention and Cessation Efforts**

**Smoke-Free Maryland**
Smoke-Free Maryland is a statewide coalition of more than 100 health, religious, and business organizations, as well as countless active individuals, working to reduce and prevent tobacco-induced death and disease. The coalition represents at least 500,000 Marylanders and works to reduce tobacco-induced illness and death by:

- advocating for significantly higher tobacco prices.
- preventing the sale of tobacco to minors.
- restricting targeted tobacco advertising.
- protecting workers and the public from second-hand smoke.
- helping smokers who want to quit get treatment.
- advocating for local government control over the sale, distribution, marketing, and use of tobacco products.

**American Cancer Society**
The American Cancer Society has developed several programs and planning tools related to tobacco-use prevention and cessation. “Communities of Excellence in Tobacco Control” is an American Cancer Society planning tool used to equip members of local coalitions with the skills and resources they need to serve as catalysts and leaders in the cause of tobacco control. A variety of advocacy, business, and health-related partners who have a shared commitment to tobacco control and community mobilization are involved in this effort. In a nutshell, “Communities of Excellence in Tobacco Control” helps communities to:

- complete a tobacco control community assessment.
- form or strengthen a tobacco control coalition.
- create a tobacco control plan of action.

“Communities of Excellence in Tobacco Control” materials and workshops are available at local American Cancer Society offices.

“The Power of Choice” is a tobacco control tool kit created for teens by the American Cancer Society. It can be used to empower youth to join adults in making a difference in communities by preventing tobacco use among youth and increasing awareness about the powerful influence the tobacco industry has over youth. It contains suggested empowerment activities, meeting ideas, tip sheets, skill-building techniques, and suggests ways youth can stay active in community tobacco control activities. “The Power of Choice” is designed to complement the guide “Communities of Excellence in Tobacco Control.” It focuses on connecting youth advocacy to tobacco control activities, impacting tobacco control policies, youth attitudes towards tobacco use, and environmental changes related to tobacco.

**American Lung Association**
Since 90 percent of smokers begin smoking before the age of 18, the American Lung Association targets youth with their tobacco-use prevention activities. Youth-based programs provide an opportunity to empower youth to serve as agents of change and advocates for tobacco-free communities and schools. Teens Against Tobacco Use (T.A.T.U.) has met with critical acclaim nationwide for its impact not only on students, but also on teens as teachers. T.A.T.U. trains teens to help younger children remain tobacco-free and is built on the same principles that are the cornerstone of school- and community-based service learning.

The American Lung Association’s Tobacco Free School Environments is a program based on the Centers for Disease Control School Health Guidelines to Prevent Tobacco Use and Addiction. This program utilizes all seven components of the CDC guidelines that provide an ongoing educational environment about the hazards of tobacco and about how the tobacco industry markets its deadly products to youth. It also includes involv-
ing youth in programs like T.A.T.U. and in providing cessation programs for those youth who want to quit.

Toxic Soup is an American Lung Association program that gives kids a better understanding of the harmful chemicals that are found in tobacco products. Kids are given a list of chemical ingredients found in tobacco products and then shown dangerous household products that contain the same ingredients and that have warning labels on the containers highlighting the dangers of these chemicals. The point is that although the same chemical ingredients are found in tobacco, no warning labels are given on tobacco products.

The American Lung Association, in collaboration with West Virginia University, developed Not On Tobacco (N-O-T), a revolutionary new approach to help teens quit smoking. This program has been extensively field-tested in 15 sites nationwide with encouraging results in helping teens quit or reduce the number of cigarettes smoked. The program incorporates a life management skills approach that is applicable to any health risk behavior.

Freedom From Smoking® is an eight-session group clinic program led by trained experts from the American Lung Association. The program uses a positive behavior change approach that teaches the smoker how to become a nonsmoker. It provides key information on behavior modification, stress management, weight control, and staying smoke-free for good. The Freedom From Smoking® program has been extensively evaluated and has an average quit rate of 27% after one year. A seven-module version of the program is also available online and is free to those who want to quit smoking in the privacy of their homes. It provides the same high quality information as the group clinic program.

The Quit Kit is a free smoking-cessation packet offered by the American Lung Association and includes a booklet of tips for quitting successfully, a summary of nicotine replacement medications, strategies for weight control, and a listing of smoking-cessation programs in local communities.

The American Lung Association of Maryland’s “Tobacco Smoke Hurts My Lungs...” is a public awareness campaign designed to 1) educate smokers, especially parents or guardians who smoke, about the effects of secondhand smoke on children's health and 2) encourage them to protect children from exposure. The message will affect change in the behavior of the target community and the Maryland smoking community at large.

### American Heart Association

In order to reduce tobacco use, particularly among children, the American Heart Association (AHA) supports public policies in accordance with the following set of core principles for legislation:

- Provide significant funding for comprehensive public health education programs, including smoking cessation, counter-advertising, and state and local initiatives.
- Support significant price increases on tobacco products.
- Prohibit tobacco marketing and advertising, particularly that targeted at women, children, and minorities.
- Ban smoking in public places, including the workplace.
- Support significant, meaningful penalties on the tobacco industry for failure to reach targets for reducing tobacco use among youth.
- Oppose federal preemption of state and local statutes, and state preemption of local statutes.
- Support adequately funded and full FDA authority over the manufacture, sale, distribution, labeling, and promotion of tobacco.
- Support international tobacco control initiatives, including support for the World Health Organization’s Framework Convention on Tobacco Control, and prohibit U.S. government activities that would facilitate marketing tobacco products overseas.
- Cease governmental financial support for the growth, promotion, and marketing of tobacco, and support the creation of programs to assist farmers and tobacco-growing regions to develop economic alternatives to tobacco.

### Gaps in Tobacco-Use Prevention and Cessation in Maryland

#### Inadequate Funding of Tobacco-Use Prevention and Cessation Programs

The CDC has identified “best practices” for comprehensive state tobacco-use prevention and cessation programs, and the funding levels necessary to support such programs in each state. If Maryland is going to reduce the human and economic toll that tobacco use
causes, it is recommended that Maryland fully fund every component and element of its CDC model program. Although Maryland committed to such a program in legislation passed in the spring of 2000, the program has never been funded at even the minimum level recommended by the CDC, and available resources are directed elsewhere.

**Tobacco Settlement Funds Not Prioritized for Reducing Tobacco-Related Disease**

Maryland’s settlement with the tobacco industry (to recover the cost of past medical services provided through Medicaid that were incurred as a result of tobacco-related disease) is the state’s Cigarette Restitution Fund’s sole revenue source. These proceeds, given their origin and the well-documented threat to the public health that tobacco use (and nicotine addiction) poses to our citizens, must first be used to reduce the human and economic toll that tobacco exacts before being committed to other worthwhile purposes. It is recommended that funding of Maryland’s Tobacco-Use Prevention and Cessation Programs at no time be less than the minimum amount recommended by the CDC.

**Lack of a Long-Term Commitment to Significantly Reduce Tobacco-Related Disease**

Significant reductions in tobacco-related disease, in the costs of treating such disease, and in the tax burden resulting from these costs cannot occur without a significant reduction in tobacco use in the state. In turn, changes in tobacco-use behavior cannot occur without a programmatic policy effort by the state and its local communities. Such an effort requires adequate resources and a long-term bipartisan commitment to a healthier Maryland for all citizens. It is recommended that the state commit to its CDC-modeled Comprehensive Tobacco-Use Prevention and Cessation Program for a period of not less than 10 years, and, in any event, until a 50% reduction in tobacco use (from 2000) has been achieved.

**Lack of Adequate Public Policy Support to Reduce Tobacco-Related Disease**

Significant reductions in tobacco use, and the consequent improvement in the health and well being of all Maryland residents, cannot occur merely as a result of the efforts of Maryland’s Tobacco-Use Prevention and Cessation Program. The CDC “Best Practices in Tobacco Use Prevention” recognizes that such a comprehensive program must also be supported by the adoption of statewide and local public policies that complement and advance the vision of a healthier Maryland. It is recommended that the state and local communities support Maryland’s programmatic effort with public policies that complement and further the vision, goals, and objectives of the program, including but not limited to: (1) preventing exposure to second-hand smoke in the workplace, (2) reducing children’s exposure to second hand smoke, (3) ensuring that all tobacco users who want to quit have access to affordable or free cessation services, (4) increasing the state excise tax on cigarettes to at least $1.50 by 2007, (5) preventing retailers from selling tobacco products to youth under the age of 18, and (6) providing for continuous evaluation and improvement of state and local tobacco programs.

**Lack of Funding for Tobacco-Use Cessation Research and Cancer Research**

It is clear that over 50% of the Maryland youth and adults that currently use tobacco wish to quit. Once Maryland is fully funding its tobacco-use prevention and cessation programs, then additional funding should be directed to support behavioral research by the Academic Health Centers in Maryland for the development of even more effective tobacco-use cessation programs for all demographic groups. In addition, Maryland should continue to use tobacco settlement funds to support research into tobacco-related malignancies, diagnosis, prevention, and treatment.
Tobacco-Use Prevention and Cessation and Lung Cancer
Goals, Objectives, and Strategies

**Goals:**
Substantially reduce tobacco use by Maryland adults and youth.
Substantially reduce youth and adult exposure to second-hand smoke.

**Targets for Change**
By 2008, reduce the proportion of Maryland middle school youth that currently smoke cigarettes to no more than 6.2%.

The Maryland baseline is 7.3%.
Source: Maryland Youth Tobacco Survey (2000).

By 2008, reduce the proportion of Maryland high school youth that currently smoke cigarettes to no more than 20.3%.

The Maryland baseline is 23.7%.
Source: Maryland Youth Tobacco Survey (2000).

By 2008, reduce the proportion of Maryland adults that currently smoke cigarettes to no more than 15%.

The Maryland baseline is 17.5%.
Source: Maryland Adult Tobacco Survey (2000).

By 2008, increase the proportion of Maryland adults that would support a proposal to make all restaurants in their community smoke-free to 72.1%.

The Maryland baseline is 63.0%.
Source: Maryland Adult Tobacco Survey (2000).

**Objective 1:**
Fund Maryland’s Comprehensive Tobacco-Use Prevention and Cessation Program at least at the minimum level recommended by the Centers for Disease Control and Prevention.

**Strategies**
1. Document the cost of tobacco-related disease in human and economic terms to the Maryland economy and its citizens.
2. Document the benefits of a comprehensive tobacco-use prevention and cessation program in reducing the human and economic toll tobacco use is exacting from Maryland.
3. Document the extent of the resources made available to the state of Maryland as a result of its settlement with the tobacco industry and the reasons for the lawsuit.
4. Document how Maryland is prioritizing its use of proceeds from the tobacco settlement.
5. Communicate these findings to interested citizens and key stakeholders.
6. Advocate for full funding of every component of Maryland’s Comprehensive Tobacco-Use Prevention and Cessation Program, including, but not limited to, a comprehensive quit line to assist Marylanders in their attempts to quit; Maryland’s mass media campaign to counteract tobacco industry marketing efforts; tobacco-use cessation and prevention programs; surveillance and evaluation activities; and the legal resource center that provides technical support for local tobacco control initiatives.
Objective 2:
Establish public policy that supports state and local bans on smoking in all public places and workplaces.

Strategies:
1. Ban smoking in all workplaces, including eating and drinking establishments.
2. Ban smoking at day-care facilities at all times when children may be present (closing the COMAR 07.04.01.33 loophole that prohibits smoking in family day-care facilities only while “engaged in care giving activities requiring direct physical contact…”).
3. Establish tobacco-free zones that prohibit the use of tobacco products by youth or adults on school and recreational properties at all times.
4. Explicitly permit local restrictions on smoking that are more stringent than statewide restrictions.

Objective 3:
Increase the excise tax on cigarettes to $1.50.

Strategies:
1. Enact state legislation increasing the excise tax on cigarettes and other tobacco products. This is a proven strategy that will reduce the use of tobacco, particularly among underage youth. Unlike other proposals to increase taxes, this proposal is directly correlated with improving the health of Maryland citizens.
2. Enact state legislation to permit civil agencies to enforce Maryland's existing prohibition on the sale of tobacco products to youth less than eighteen years old, thereby relieving overburdened law enforcement agencies from this responsibility.
3. Civil enforcement must provide for a graduated series of penalties, against both the licensee and the person who makes the illegal sale. These penalties must culminate in a mandatory suspension of a cigarette retailer's license to sell tobacco, and ultimately result in its revocation for chronic violators.
4. Enact state legislation requiring tobacco retailers to take reasonable steps to verify that a prospective purchaser is of legal age by demanding and reviewing photo-identification. ID must be demanded of all persons who appear to be under the age of 27 (the former FDA requirement).
5. Enact state legislation providing an affirmative defense for tobacco retailers who use electronic means to verify identification offered as proof of age in connection with the sale of tobacco products.
6. Enact state and local legislation that requires tobacco retailers to place all tobacco products beyond the reach of their customers absent the intervention of store personnel.
7. Educating tobacco retailers on any changes in the law and their responsibilities as tobacco retailers must be an integral part of any enforcement program.

Objective 4:
Enact civil prohibition on the sale of tobacco to youth under 18 years of age.

Strategies:
1. Enact state legislation to permit civil agencies to enforce Maryland's existing prohibition on the sale of tobacco products to youth less than eighteen years old, thereby relieving overburdened law enforcement agencies from this responsibility.
2. Civil enforcement must provide for a graduated series of penalties, against both the licensee and the person who makes the illegal sale. These penalties must culminate in a mandatory suspension of a cigarette retailer's license to sell tobacco, and ultimately result in its revocation for chronic violators.
3. Enact state legislation requiring tobacco retailers to take reasonable steps to verify that a prospective purchaser is of legal age by demanding and reviewing photo-identification. ID must be demanded of all persons who appear to be under the age of 27 (the former FDA requirement).
4. Enact state legislation providing an affirmative defense for tobacco retailers who use electronic means to verify identification offered as proof of age in connection with the sale of tobacco products.
5. Enact state and local legislation that requires tobacco retailers to place all tobacco products beyond the reach of their customers absent the intervention of store personnel.
6. Educating tobacco retailers on any changes in the law and their responsibilities as tobacco retailers must be an integral part of any enforcement program.
7. Local communities must be explicitly permitted to adopt local restrictions that are more stringent than statewide restrictions.

8. Local governments should be encouraged to pass ordinances that make it easier to enforce youth access to tobacco laws.

**Objective 5:**
Ensure access to tobacco-use cessation services.

**Strategies:**
1. Enact state legislation mandating health insurance plans in Maryland cover tobacco-use cessation programs and products.
2. Implement the CDC-recommended statewide quit line to ensure that smokers who want to quit have access to help when they need it from wherever they live in the state.
3. Develop strategies to provide cessation products to the uninsured and underinsured.

**Objective 6:**
Enhance existing program activities.

**Strategies:**
1. Promote increased collaboration between all Maryland tobacco-use prevention and cessation programs to avoid duplication of resources and efforts.
2. Develop and promote a provider reminder and education program for smoking cessation.
3. Develop and promote tobacco-use cessation programs specifically aimed at college-age individuals and pregnant women.
4. Develop and promote education programs on the benefits of smoke-free homes (i.e. those with small children and/or asthmatics).
5. Continue to work to reduce patients’ out-of-pocket costs for effective treatments for tobacco use and dependence, including the uninsured, underinsured, and college-age youth.
6. Improve existing enforcement of smoke-free schools.
7. Improve enforcement of existing local and state prohibitions on sale of tobacco to minors.
8. Develop and promote education programs for members of the judiciary and business community on the importance of enforcing youth access laws.
9. Continue and strengthen tobacco-use prevention education in grades K-12 as part of the Comprehensive Tobacco Use Prevention and Cessation Program.
Objective 7:
Continuously evaluate and improve state and local programs.

Strategies:
1. Develop and implement a formal evaluation plan to ensure the effective use and allocation of program resources.
2. Contract with an independent evaluator to assess the tobacco-use prevention and cessation programs.
3. Conduct biannual surveys of adult and youth tobacco-use behaviors at the statewide and county levels.
4. Conduct special population studies targeting high risk and targeted populations.
5. Develop a statewide data collection system for all elements of local tobacco grant activity.
6. Develop and disseminate user-friendly reports for a variety of audiences as survey data becomes available.
7. Develop and disseminate user-friendly reports of local tobacco control activities and local resource directories.
8. Encourage the reporting and dissemination of local best practices, information, data, and experiences.
9. Develop a recognition program for efforts of local jurisdictions.
10. Continue to refine and support the counter-marketing/media campaign.
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