August 2005

# Second Annual Independent Evaluation of New York's Tobacco Control Program

**Final Report** 

Prepared for

New York State Department of Health Corning Tower, Room 710 Albany, NY 12237-0676

Prepared by

RTI International 3040 Cornwallis Road Research Triangle Park, NC 27709-2194

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Prepared by

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<sup>\*</sup>RTI International is a trade name of Research Triangle Institute.

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## **EXECUTIVE SUMMARY**

The 2005 Independent Evaluation Report (IER) constitutes RTI International's (RTI's) second annual independent assessment of the New York Tobacco Control Program (NYTCP). In the 2004 IER, we found that NYTCP was following a well-reasoned approach to tobacco control, built on evidence-based interventions. We also found that funding for the program was approximately half that recommended by the Centers for Disease Control and Prevention (CDC) and at the national average. We noted that the program did not expend all of its available resources, in part because of the natural process of building program capacity and in part because of avoidable delays from cumbersome bureaucratic processes.

Because the primary purpose of the 2004 IER was to establish baseline measures against which to assess future progress, many of the evaluation findings pointed to opportunities for the program to address gaps in knowledge. Specifically, we found that smokers underestimated the health risks of smoking and had misperceptions about the benefits of low-tar cigarettes and the dangers of nicotine. The 2004 IER contained a range of findings pertaining to the impact of the Clean Indoor Air Act (CIAA). These findings indicated that compliance with the CIAA was generally high, with the exception of bars and bingo halls; that support for the law was high and increasing over time; and that there was no apparent adverse economic impact as a result of the law. We also noted that the program; used ineffective messages that failed to elicit strong emotional responses that have been shown to be effective; and were absent for long stretches of time, including following implementation of the CIAA—a missed historic moment in tobacco control in New York.

Major recommendations included directing the program to use more effective media to reach 60 percent of New Yorkers and to redouble its efforts to combat the estimated \$830 million annual tobacco advertising and promotional expenditures in New York. In response to the successful implementation of the CIAA that was fostered by NYTCP, we recommended focusing future efforts to eliminate exposure to secondhand smoke (SHS) on promoting voluntary smoke-free home and car policies to reduce the primary source of exposure to SHS. Finally, we noted that current efforts to enforce compliance with the Adolescent Tobacco Use Prevention Act (ATUPA) fall short of what is needed to reduce youth's access to tobacco. However, we did not recommend investing scarce program resources into increased enforcement in lieu of other more promising youth interventions.

### Response to 2004 IER

Since the 2004 IER, the program has been actively building its capacity for tobacco control and refining current approaches in response to feedback from the independent evaluation

and based on its own assessments of program performance. Building on the existing evidence-based strategies, NYTCP has expanded its programmatic activities by

- establishing 19 Cessation Centers focused on increasing the number of health care
  provider organizations that have systems to screen patients for tobacco use, provide
  brief advice to quit to all patients, and refer patients to appropriate resources such
  as the Quitline;
- actively promoting the New York State Smokers' Quitline Fax-to-Quit health care provider referral system in concert with establishing the Cessation Centers;
- distributing free nicotine replacement therapy (NRT) starter kits to eligible Quitline callers;
- implementing a new statewide initiative to combat the influence of tobacco advertising, sponsorships, and promotions; and
- overhauling its approach to media and countermarketing by funding Community Partners to implement effective, coordinated media and committing department resources to stronger media messaging.

NYTCP also revisited its Strategic Plan in January 2005 and made reasonable revisions to reflect the expansion of programmatic activities noted above and changes in the tobacco control environment. Specifically, the program implemented the initiative to counter tobacco marketing in response to an increasing trend in tobacco marketing expenditures and pervasive promotion of smoking in the movies. The program no longer actively promotes support for the CIAA because support is already quite high. The program also dropped two cessation-related objectives because it does not have adequate resources to have a meaningful impact on access to cessation services: one that focused on promoting increased access to cessation counseling and services and another aimed at promoting access to low-cost NRT for low-income, non-Medicaid tobacco users.

With respect to improving the existing programmatic interventions, the program has been very responsive to the 2004 IER recommendations. The program has made significant improvements to countermarketing efforts. The choice of television advertisements has improved markedly, and our findings indicate that New Yorkers have responded favorably to these changes:

- awareness of media messages increased;
- messages with greater emotional content have elicited more favorable reactions from New Yorkers than previous, less effective messages; and
- the advertisements have had a positive impact on selected knowledge, attitude, and behavioral outcomes.

Despite these improvements and impacts, a 6-month gap when no media messages were aired negatively affected awareness and may explain why there was not a more consistent

influence on important programmatic outcomes. In addition, although the program increased awareness of media messages, the level of awareness fell short of our recommendation to reach 60 percent of the population. In light of the choices of media messages, this shortfall is likely because of limited resources. We did find that when a Community Partnership aired effective messages, in combination with NYSDOH state ads, overall awareness reached 59 percent. Although this illustrates the potential for the program to reach the recommended target, there are media markets in the state where the cost of television advertising requires a larger investment of resources.

NYTCP has also continued to build capacity among its Community Partners. The program developed and implemented the Advertising, Sponsorship, and Promotion (ASP) initiative to counter tobacco marketing. Launching this initiative has required a significant investment by the program to develop a tool kit and provide training and ongoing technical assistance. In addition, the program established 19 Cessation Centers, which has involved increased programmatic workload to provide training, technical assistance, and oversight and establish these centers consistent with the program's vision.

Overall, the level of programmatic activity and direction of the program indicate that the program is highly functioning, productive, and shrewd with available resources.

#### 2005 IER Conclusions and Recommendations

Findings from the current report suggest that the program is having an impact on tobacco use, and rates of decline in New York have outpaced rates of decline in the rest of the country. Given the average level of program funding, this is a positive finding. However, our analyses indicate that tax evasion (i.e., purchasing cigarettes from low- or untaxed sources) has reduced the impact of recent increases in cigarette excise taxes by negatively affecting smoking cessation outcomes.

Nonsmokers' exposure to SHS has declined among youth and adults, although exposure to SHS in the workplace remained at 10 percent from Q3 2003 to Q1 2005, despite being prohibited in virtually all workplaces. We found that the CIAA has had no adverse economic impact on revenue for bars and full-service restaurants and compliance is high, with the exception of bars where compliance was lower compared with restaurants. Voluntary restrictions on smoking in homes and cars increased slightly from the third quarter of 2003 to the first quarter of 2005. Moving forward, we recommend that the program increasingly focus efforts on promoting smoke-free homes and cars by reducing other Goal 1-related activities (e.g., any remaining activities focused on supporting the CIAA).

NYTCP's emphasis on efforts aimed at decreasing smoking in the movies and tobacco advertising and promotions via the new ASP initiative is well supported in the literature, where these influences have been shown to increase youth smoking. It is too early to conclude whether this initiative will have its intended impact, and little is known about the effectiveness of such interventions. One important missed opportunity that will likely affect the future success of the ASP initiative was the failure to coordinate Department mass media with the community-based ASP activities because of the bureaucratic and politicized approval process. As noted above, NYTCP has made significant progress toward addressing critiques of mass media efforts from the 2004 IER, including achieving the recommended levels of campaign awareness by airing "high impact" ads. Although the program appears to have made significant progress in implementing televised media, this improvement in the quality of television ads began in 2005, and therefore we only have limited evidence that knowledge, attitudes, and outcomes have changed significantly over time among youth and adults. As we note elsewhere, this is partially explained by intermittent media campaign efforts and evolving programmatic strategies that require the establishment of additional baseline knowledge and attitude questions. In the future, the program should avoid delays in the approval of media to prevent gaps in mass media efforts that can adversely affect program outcomes. We also recommend that the program continue to select messages with a strong emotive quality and establish appropriate short-term indicators of impact that are consistent with the objectives of the media efforts.

This report establishes the indicators by which the success of the newly created Cessation Centers will be measured. Baseline data point to gaps that the Cessation Centers are designed to address. In addition, although we do not have sufficient data to assess the impact of NRT starter kits, New York City's NRT giveaway did increase the quit success rate among those who received NRT. We observed several positive trends in cessation-related outcomes. Although exposure to mass media messages was not associated with these increases, it was associated with greater awareness of and number of calls to the Quitline. Our findings also suggest that smokers' access to low-tax cigarettes is correlated with a lower percentage of smokers making a quit attempt and with decreased intentions to quit.

Our analyses suggest that NYTCP's approach to curbing youth smoking by changing adult norms and behaviors is likely to succeed—we found that declines in adult smoking are predictive of subsequent declines in youth smoking. Compliance with youth access laws in New York has not significantly increased since the 2004 IER. To speed declines in youth smoking would require greater investment in youth-targeted interventions such as mass media campaigns that have been shown to have a more direct and immediate influence on youth smoking. However, this is only feasible with an increase in program resources consistent with CDC recommendations.

In summary, we recommend the following programmatic changes:

- Double funding for NYTCP to the CDC minimum recommended level.
- Increase investment in effective media to consistently reach a minimum of 60 percent awareness.
- Increase resources for the New York State Smokers' Quitline to

- accommodate increases in demand from increased use of effective media, and
- provide additional NRT starter kits.
- Increase funding for cessation to address key programmatic gaps.
- Place greater emphasis on effectively promoting smoke-free homes and cars in households with smokers.
  - Ensure that smoke-free home and car interventions are effective, based on available evidence.

# 1. INTRODUCTION

The 2005 Independent Evaluation Report (IER) constitutes RTI International's (RTI's) second annual independent assessment of the New York Tobacco Control Program (NYTCP). According to the Health Care Reform Act (§1399-jj), the purpose of the independent evaluation is to "direct the most efficient allocation of state resources devoted to tobacco education and cessation to accomplish the maximum prevention and reduction of tobacco use among minors and adults." In the 2004 IER, we found that NYTCP's strategic approach was solidly grounded in evidence-based strategies and that programmatic resources were invested appropriately and that it established baseline indicators to monitor program progress in achieving its statutorily-mandated objectives: to change attitudes toward tobacco and decrease prevalence of smoking among youth and adults. We also noted that program funding was half of what the Centers for Disease Control and Prevention (CDC) recommends, well short of estimated tobacco industry expenditures on advertising and promotion (\$830 million) in New York State, and not commensurate with the health and economic burden of tobacco to New Yorkers. We also found that the program was not able to fully expend available programmatic funding in recent years. In addition to these broader findings, we made a number of specific recommendations. In this report, we (1) assess responses to our recommendations and describe other programmatic changes since our previous report, (2) briefly describe changes and enhancements to the evaluation, and (3) evaluate progress toward stated program goals with available resources. We conclude the report with a summary of findings and recommendations.

The remainder of this report is structured as follows:

- Chapter 2 summarizes recommendations from the 2004 IER and describes the program's responses to these recommendations and other programmatic changes.
- Chapter 3 provides a brief overview of the comprehensive evaluation plan, describes new evaluation studies put in place since the first IER, and describes the methodological approach used to conduct the analyses presented in this report.
- Chapter 4 presents evaluation findings to date, both cross-cutting and for NYTCP's four primary programmatic goals.
- Chapter 5 presents conclusions and recommends next steps for the program.

# 2. OVERVIEW

This chapter summarizes programmatic changes in the past year, including responses to recommendations from the first Independent Evaluation Report (IER). In the 2004 IER, we indicated that the program's approach was well-grounded in evidence-based strategies. However, we also noted a number of shortcomings with respect to implementation of the program's plan and other constraints on the program. The current report focuses on programmatic changes from September 2004 to June 2005 and analyzes data from the Adult Tobacco Survey (ATS), the primary evaluation data source, through March 2005.

We begin by discussing changes made to the Strategic Plan in January 2005. We then summarize our previous recommendations and assess the program's response. This discussion focuses on changes to the overall program and its constituent interventions.

### 2.1 Changes to the Strategic Plan

The New York Tobacco Control Program (NYTCP) takes a comprehensive approach to achieve four primary programmatic goals: (1) eliminate exposure to secondhand smoke (SHS), (2) decrease the social acceptability of tobacco use, (3) promote cessation from tobacco use, and (4) prevent initiation of tobacco use among youth and young adults. To make progress toward achieving these goals, the program uses a three-pronged approach to tobacco control, consisting of community mobilization, media and countermarketing, and cessation. In the 2004 IER, we noted that the program is grounded in evidence-based strategies, including the following:

- Smoking bans and restrictions
- Multicomponent mass media campaigns with interventions
- Multicomponent telephone support systems (Quitlines)
- Health care provider reminders alone or with provider education to promote cessation
- Reducing patient costs for treatments
- Increasing the unit price of tobacco products

In this section, we review and assess changes to the Strategic Plan.

In January 2005, NYTCP updated its August 2003 Draft Strategic Plan and associated goals and objectives. The program periodically revises its Strategic Plan to respond to changes in the tobacco control environment, adapt to evolving tobacco industry marketing, and reflect the expansion of programmatic activities. The January 2005 revision recognizes three important recent changes:

- Successful implementation of the Clean Indoor Air Act (CIAA)
- Significant increases in tobacco industry expenditures on tobacco marketing and promotions
- Expansion of programmatic activities, including establishment of 19 Cessation Centers; implementation of the Advertising, Sponsorship, and Promotion (ASP) initiative; and distribution of nicotine replacement therapy (NRT) via the New York State Smokers' Quitline

Overall, the program made reasonable revisions to the plan in response to the changes noted above. The revised plan provides more specific and measurable objectives and provides a fuller description of the program's approach. In making these changes, the program eliminated 4 objectives, left 13 objectives unchanged, and created new objectives by expanding 10 previous objectives into 15 more specific objectives. Exhibit 2-1 summarizes the four primary program goals and associated objectives in 2003 and 2005.

The one change in Goal 1 (Eliminate Exposure to Secondhand Smoke) objectives was the removal of the first objective: to increase public support for the CIAA. Our previous report indicated a high and increasing level of public support for the CIAA; therefore, it is reasonable not to continue to emphasize this objective. With the historic passage of the CIAA, the program now focuses primarily on eliminating exposure to SHS in homes and family vehicles and in educational institutions. In the 2004 IER, we reported that overall 69 percent of adults reported that smoking was not allowed in their homes. However, only approximately one in four adults in homes with at least one adult smoker reported that smoking is banned in the home. Previous research indicates that even a partial restriction on smoking in the home can decrease exposure (Biener et al., 1997; Kegler and Malcoe, 2002). In addition, smokers who are aware of the health benefits of smoking bans may be more likely to implement them (Gilpin et al., 1999; Pizacani et al., 2002; Norman et al., 2000). Finally, there is some evidence that restrictions on smoking in the home promote cessation (Kegler and Malcoe, 2002; Farkas et al., 1999; Gilpin et al., 1999; Norman et al., 2000; Pierce, Gilpin, and Farkas, 1998). These data provide a strong rationale for promoting restrictions on smoking in the home.

The revised Goal 2 objectives are now more descriptive, specific, and measurable. The specific changes refer to reducing tobacco advertising and promotions occurring in (1) bars, fraternities, and other "adult only" facilities; and (2) newspapers and magazines. The program also now aims to reduce all types of retail advertising, not only point-of-purchase advertising. These changes reflect increased attention to reducing tobacco advertising and promotions, which is consistent with our previous recommendation that the program redouble its efforts to counter the tobacco industry's expenditures on tobacco advertising and promotion: in 2002, New Yorkers were exposed to an estimated \$830 million of

NYTCP Strategic Plan		
2003	2005	
Goal 1. Eliminate exposu	re to secondhand smoke.	
Increase public support for New York's comprehensive clean indoor air law.	Dropped	
Increase compliance with New York's comprehensive clean indoor air law.	No change	
Increase the percent of adults and youth who live in households where smoking is prohibited.	No change	
Increase the percent of adults who drive or ride in vehicles where smoking is prohibited.	No change	
Increase the number of educational institutions (elementary, secondary and post-secondary) that implement effective tobacco-free policies to eliminate tobacco use from all facilities (including dormitories), property, vehicles, and events.	Increase the number of educational institutions (elementary, secondary and post-secondary) that effectively implement tobacco-free policies to eliminate tobacco use and tobacco products from all facilities (including dormitories), property, vehicles, and events.	
Goal 2. Decrease the social	acceptability of tobacco use.	
Increase antitobacco attitudes among youth and adults.	No change	
Reduce tobacco sponsorship of sporting, cultural, and entertainment and other events in the community, region, and state.	Increase the number of sporting, cultural, entertainment, art, and other events in the community, region, and state that have a written policy prohibiting acceptance of tobacco company sponsorship.	
Reduce tobacco use and promotion in movies, arts, and entertainment.	Reduce tobacco promotions occurring in sporting, cultural, entertainment, art and other events in the community, region, and state.	
	Reduce tobacco promotions occurring in bars, fraternities, and other "adult only" facilities.	
Reduce the proportion of retailers that post point- of-purchase tobacco advertising.	Reduce the amount of tobacco advertising in the retail environment.	
	Increase the number of magazines and newspapers that have a written policy prohibiting acceptance of tobacco company or product advertising.	
	Increase the number of local laws, regulations, and voluntary policies that prohibit tobacco use in outdoor areas, including public parks, beaches, play grounds, campuses, and outdoor areas of businesses, other grounds, recreation areas, and in proximity to building entryways.	

(continued)

NYTCP Strategic Plan						
2003	2005					
Goal 3. Promote cessation from tobacco use.						
Increase the number of health care provider organizations that have a system in place to implement the Prevention Services Task Force clinical guidelines for cessation.	Increase the number of health care provider organizations that have a system in place to screen all patients for tobacco use and provide brief advice to quit at every patient visit.					
Increase the number of Medicaid recipients who access pharmacotherapy for smoking cessation through the Medicaid program.	Increase the number of Medicaid recipients who access pharmacotherapy for smoking cessation through Medicaid or through the Quitline.					
Increase the number of health plans that provide coverage of evidence-based treatment for nicotine dependence.	Increase the percent of smokers with health insurance who report that their health plan provides coverage for tobacco dependence treatment.					
Increase the number of non-Medicaid eligible low- income tobacco users who receive free or reduced-priced pharmacotherapy from the NYTCP to support a cessation attempt.	Dropped					
Increase access to cessation counseling and services.	Dropped					
	Increase the percent of smokers who have heard of and who have called the New York State Smokers' Quitline.					
	Increase the number of smokers referred to the New York State Smokers' Quitline through the Fax-to-Quit program.					
	Increase the percent of smokers who have quit successfully (for at least 6 months) in the past 12 months.					
Goal 4. Prevent initiation of tobacco	use among youth and young adults.					
Increase the unit price of cigarettes sold in New York State.	No change					
Increase the number of jurisdictions that levy their own tobacco excise taxes. Increase the amount of each local tobacco excise tax.	Increase the number of jurisdictions that levy their own cigarette excise taxes. Increase the amount of each local tobacco excise tax.					
Increase the number of jurisdictions with a 5 percent or less illegal sales rate to minors.	No change					
Reduce the statewide retailer noncompliance with sales to minor's law rate to 5 percent or less.	Dropped					
	Increase the percent of adults who agree that movies rated G, PG, and PG-13 should not show actors smoking.					
	Decrease the number of movies rated G, PG, and PG-13 that contain smoking or tobacco product placement.					

Exhibit 2-1.	NYTCP Strategic Plan, 2003 and 2005 (continued)
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advertising and promotions. In addition, Goal 2 now includes a new objective aimed at increasing voluntary policies that prohibit tobacco use in outdoor areas.

Goal 3 objectives changed in two substantive ways from the 2003 Strategic Plan. First, the program dropped two objectives: one to increase the number of non-Medicaid eligible lowincome tobacco users who receive free or reduced-priced pharmacotherapy from NYTCP and another to increase access to cessation counseling and services. The program made the latter change because it does not currently have adequate resources to have a meaningful impact on access to cessation counseling and services. Rather than focusing on providing direct cessation services, the program is focusing on fostering system-level changes in health care provider organizations (through the Cessation Centers) with the objective of increasing the percentage of organizations that screen all patients for tobacco use and provide brief advice to quit at every patient visit. The reduced emphasis on non-Medicaid eligible low-income tobacco users reflects several factors: efforts to promote cessation are focused on all smokers, including this population; resources are not sufficient to dedicate to promoting cessation within this population; and it is not clear how best to reach this population with complementary cessation activities.

Changes in Goal 4 objectives reflect the importance of the influence of smoking in the movies on youth smoking. Two new objectives are to (1) increase the percentage of adults who agree that movies rated G, PG, and PG-13 should not show actors smoking; and (2) decrease the number of movies rated G, PG, and PG-13 that contain smoking or tobacco product placement. Although both of these objectives are sensible and well-grounded in the literature, they appear more consistent with Goal 2 because they have to do with decreasing the social acceptability of tobacco and have the potential to influence adults as well as youth. We therefore recommend including them in Goal 2 objectives.

### 2.2 Addressing Recommendations from the 2004 Independent Evaluation Report

In the 2004 IER, we commented on and made recommendations that pertain to the (1) overall functioning of the program and its ability to implement activities consistent with its Strategic Plan, (2) individual programmatic interventions/strategies and their implementation, and (3) gaps in knowledge and other evaluation findings that suggest potential opportunities for the program. We revisit each of these in the following subsections and comment on how the program has responded to recommendations.

#### 2.2.1 Overall Program Implementation

One of the findings from the 2004 IER was that the program failed to expend all of its available resources. We revisit this issue and examine program funding and expenditures. In 2004, \$48.8 million was allocated for tobacco control from the Health Care Reform Act (HCRA) (current annualized appropriation plus carry-forward of unspent funding from

previous years). NYTCP spent 77 percent of the available allocation for 2004 and 96 percent of its annualized appropriation (Exhibit 2-2). This represents an improvement over last year when the corresponding statistics were 70 percent and 86 percent, respectively.

	2000	2001	2002	2003	2004 <sup>a</sup>
Expenditures	\$11,147,742	\$32,624,996	\$40,210,122	\$35,361,233	\$37,676,350
Annualized Appropriation	\$32,500,000	\$42,500,000	\$42,500,000	\$40,975,000	\$39,450,000
Program Allocation	\$39,938,999	\$52,129,999	\$52,749,999	\$50,789,999	\$48,857,900
Percentage of Allocated Funds Expended	28%	63%	76%	70%	77%
Available Funds	\$32,500,000	\$63,852,258	\$73,727,262	\$72,967,140	\$77,055,907
Expenditures as a Percentage of Available Funds	34%	51%	55%	48%	49%

Exhibit 2-2.	Expanditures	Vorcue	Allocation	2000 2004
EXHIDIT 2-2.	Expenditures	versus	Allocation,	2000-2004

<sup>a</sup>Estimated.

The 2004 allocation represents 51 percent of CDC's recommended minimum funding level for New York State. As shown in Exhibit 2-3, New York's annual 2004 expenditures represented 39 percent of CDC's minimum recommended levels for the state. The most significant gap between planned and actual expenditures in 2004 was in the area of countermarketing, followed by school programs. As previously noted, the program has faced barriers in implementing its media plans. Ignoring these two line items, the program expended 92 percent of allocated funded in 2004.

We previously reported that delays in the procurement and contracting process helped explain the gap between planned and actual expenditures. We found that the program requires a minimum of 18 months for new programmatic procurements before contracts are fully executed because of cumbersome bureaucratic procedures. As a result of such delays, Community Partners did not have fully executed contracts from August to November/ December 2004, the procurement for training services is in its 26th month of processing, and the expansion of the school policy initiative is more than 1 year behind schedule.

We are aware of one contract for the distribution of NRT via the Quitline that was established in 10 months. Two other procurements (Promising Interventions and Tobacco Free Schools Support) are still in process, and it appears that these will require 15 to 18 months before contracts are fully executed—similar to the pattern observed in our previous report. Hence, the procurement process has not changed that significantly since the 2004 IER.

Program Component	Expenditure Level	Percentage of CDC Recommended Minimum	Allocation	Percentage of CDC Recommended Minimum
Community Mobilization	\$12,417,897	91.7%	\$11,750,000	86.7%
Statewide Programs	\$86,166	1.2%	\$850,000	11.7%
Countermarketing	\$5,296,734	29.2%	\$10,000,000	55.1%
School Programs	\$2,257,344	16.7%	\$6,207,900	46.0%
Cessation Programs	\$6,937,769	35.0%	\$10,950,000	55.2%
Chronic Disease Programs	\$0	0.0%	\$0	0%
Enforcement	\$4,650,000	58.5%	\$4,600,000	57.8%
Surveillance and Evaluation	\$4,030,440	48.4%	\$2,500,000	30.0%
Administration and Management	\$2,000,000	48.0%	\$2,000,000	48.0%
Total	\$37,676,350	39.3%	\$48,857,900	51.0%

Exhibit 2-3. Program Expenditures by CDC Activity Type, 2004

A final cross-cutting recommendation from the 2004 IER called for better coordination between mass media efforts and other programmatic activities and significant policy events, such as passage of the CIAA of 2003. As described below under countermarketing campaigns, the program put plans in place to complement community-based activities with mass media campaigns. An upcoming opportunity to coordinate media with a policy change is the new cigarette excise tax collection law that goes into effect on March 1, 2006. This law requires the state to implement cigarette sales and excise taxes made to non-Native Americans on recognized reservations in the state. The legislation also requires that tax exemption coupons be provided to the recognized governing bodies of the Indian tribes or nations to ensure that cigarettes sold to tribal members on their respective reservations do not include state taxes. NYTCP could implement a media campaign to educate the public about the facts about cigarette tax evasion and the benefits of the new law to ensure more effective implementation. To determine whether investing in such a campaign would be a wise use of resources compared to other programmatic activities, the program should first assess the potential impact that such a campaign could have on key audiences and how best to reach these audiences.

#### 2.2.2 Program Component Implementation

The program has implemented a range of interventions consistent with its Strategic Plan, including the following:

- Tobacco countermarketing
- Multicomponent smoking cessation Quitline

- Community Partners
  - Community Partnerships
  - Cessation Centers
  - Reality Check Youth Action Partners
- Enforcement of the Adolescent Tobacco Use and Prevention Act (ATUPA)
- School health programs

In the subsections below, we provide an update on the status of program implementation for each of these major program components.

#### Tobacco Countermarketing

In our previous report, the most critical comments focused on the program's mass media efforts. We found that NYTCP was missing an opportunity to have a large impact on program outcomes by failing to implement media campaigns that are consistent with best practices—campaigns with messages that (1) elicit strong emotional responses among the target audiences; and (2) support, reinforce, and extend programmatic activities and significant tobacco control policies. In addition, we noted that there was no long-term media plan and no coordination with other aspects of the program, even though the literature indicates that countermarketing is effective when combined with other interventions. Finally, mass media efforts were off the air for long stretches of time, including the period around the passage of the comprehensive CIAA—an historic opportunity to reinforce the impact of policy with effective media.

We recommended that, moving forward, NYTCP implement media campaigns consistent with best practices by designing a long-term media campaign strategy that aligns media messages with the goals and objectives of the program. The media message schedule should be coordinated with other NYTCP interventions and policy changes, and to ensure use of more effective messages, the program should contract with an advertising agency with a track record of producing high-impact advertisements. To ensure that these efforts have their intended effect, we suggested that the program set a goal of 60 percent for awareness of NYTCP-sponsored advertisements.

In this section, we review the program's progress toward implementing last year's recommendations by assessing the program's planned media activities, the appropriateness of those activities, and what the program can expect to achieve given current activity levels and the types of media messages being employed.

**Tobacco Control Media Plan.** Following the recommendations in the 2004 IER, NYTCP developed a Tobacco Control Media Plan for 2004 and 2005 that describes specific statewide media activities designed to raise awareness about tobacco use and effect change in achieving the objectives of each program goal area. Specifically, NYTCP's Media Plan aims to

raise awareness of the dangers of SHS, counter the impact of tobacco industry advertising and promotions, motivate smokers to stop smoking, and counter the impact of smoking in movies. These objectives mirror the long-term program goals set forth in the NYTCP Strategic Plan. Like the program goals detailed in the Strategic Plan, the elements of the NYTCP Media Plan are cross-cutting and supportive of all goal efforts. Evidence shows that media campaigns are effective when integrated with a larger comprehensive program. Therefore, the NYTCP Media Plan calls for the design, production, and implementation of media campaigns that are coordinated with program interventions and policy change efforts across all goal areas. In the following section, we describe specific elements of the planned media activities in support of each of the program goals and the extent to which these activities are consistent with best practices and recommendations from the 2004 IER.

**Eliminating Exposure to Secondhand Smoke.** SHS has been classified as a Group A carcinogen by the U.S. Environmental Protection Agency and has been linked to the development of lung cancer in scientific studies and surgeon generals' reports. SHS has also been associated with thousands of cases of asthma, bronchitis, and pneumonia among children in the United States. To bring attention to these and other dangers of SHS, NYTCP and its Community Partners aired a number of ads in 2003 and 2004 (see Exhibit 2-4) and a series of advertisements in the second and third quarters of 2005. Partner run advertisements were from the "Careful" series, which originally aired in Massachusetts, and featured candid interviews with chemists and other professionals who work with hazardous substances and are unaware of the similarity between the materials they work with and chemicals found in secondhand cigarette smoke. The state run ads vividly depicted the effects of secondhand smoke on children or adults.

**Decreasing the Social Acceptability of Tobacco.** The tagline "Now you know/What are going to do about it?" was also planned to launch with two ads created by NYTCP in support of the ASP initiative. The ASP initiative is aimed at reducing retail tobacco advertising and promotions; periodical advertising; sponsorship and corporate giving; and promotion in movies, adult facilities, and through the mail in New York State. These ads, entitled "Walk to School" and "Convenience Store," were designed to portray the myriad tobacco promotional materials and smoking children may see during a typical walk to and from school or during a stop at a convenience store. These ads were planned to air simultaneously with a series of Community Partner-run ads during the second quarter of 2005, entitled "Breeding Ground," "Ethnic Targeting," and "Reverse Psychology," that also highlighted the deceptive marketing practices of the tobacco industry. These ads were intended to air in May and early June, prior to Community Partner press events in support of the ASP initiative, as a way to introduce communities to the messages that partners would be sharing at the press events.

Production of "Walk to School" and "Convenience Store" was delayed by 6 months because of New York State Department of Health (NYSDOH) changes in the concepts of NYTCP- created ads. As a result, the ads were never aired. The June 2005 community press events in support of the ASP initiative were held as scheduled but were supported only by Community Partner-run ads "Breeding Ground," "Ethnic Targeting," and "Reverse Psychology" and not the intended NYTCP-created ads discussed above. As such, NYTCP missed an opportunity to fully coordinate its media activities with other program initiatives, such as ASP.

Promoting Smoking Cessation. NYTCP uses television and radio advertisements from CDC's Media Campaign Resource Center as part of a media campaign designed to motivate and assist current smokers to quit. During fiscal year 2004-2005, the NYTCP media campaign to promote smoking cessation included several types of advertisements with high emotional impact, such as the "Pam Laffin" series that depicts a young woman who dies at an early age from emphysema. These ads, which aired locally and statewide during the first quarter of 2005 (Q1 2005), use intense images to depict the serious health consequences of smoking in addition to severe emotional consequences resulting from family grief. The program has also supported less traditional television campaigns, such as the "Bob Quits" campaign that invites viewers to track the progress of a young man during his attempts to quit smoking. These ads emphasize the dire consequences of not quitting, including longterm health effects and family concerns and were run by the Erie-Niagara Tobacco-free Coalition (with NYTCP funds) and the New York City Department of Health and Mental Hygiene (with its own resources). In addition to television and radio advertising, the program has used transit advertising that displays the Quitline phone number on the sides of buses and in the New York City subway system.

**Implementation of Planned Media Activities.** Consistent with the recommendations set forth in the 2004 IER, NYTCP has broadcast antismoking media messages that contain significantly greater emotional content. Beginning in Q1 2005, NYTCP implemented a new approach to airing antismoking messages. This new approach provides funds to Community Partners to run antismoking messages in a coordinated fashion statewide to complement messages aired by NYSDOH. To reflect this change, we summarize antismoking television advertisements that aired before and after this change in approach. Exhibit 2-4a summarizes ads that were run statewide by NYSDOH and locally by at least one Community Partner between Q3 2004 and Q1 2005. Exhibit 2-4b summarizes ads run statewide by NYSDOH and Community Partners under the new approach. In these exhibits, we provide a qualitative assessment of each of the ad's "impact" based on the use of intense imagery and/or strong emotions. Overall, statewide and partner-run advertising has increased its focus on smoking cessation with emotionally-laden messages that highlight the long-term effects of smoking and family concerns as reasons for quitting in addition to a number of cross-cutting messages that provide information on the New York State Smokers' Quitline.

# Exhibit 2-4a. Statewide and Local Antismoking Television Advertising in New York, Q2 2004–Q1 2005

Title	Time	Goal Area	Local/ Statewide	Message Strategies	Emotion/ Impact
Bartender	Q3 2003	SHS	Local	Personal testimony, long- term effects (heart attacks)	Low
Outside the Bar	Q3 2003	SHS	Local	Humor	Low
Waitress	Q3 2003	SHS	Local	Long-term effects of SHS, appeal for CIAA	Low
Baby Seat	Q2 2004	SHS	Statewide	Family endangerment, industry quote, health effects to infants	High
Quitting Takes Practice	Q2 2004	Cessation	Statewide	Humor, cartoon	Low
Sign of the Times	Q2 2004	SHS	Statewide	Changing social norms	Low
Cigarette Pack	Q2 2004	Cessation	Statewide	Long-term effects as reasons for quitting, concern for family	High
Little Girl	Q2 2004	SHS	Statewide	Personal testimony, short- term effects of SHS	Low
Front Porch	Q2 2004	SHS	Statewide	Personal testimony, family endangerment	Low
Never Smoke	Q2 2004	SHS	Statewide	Personal testimony, short- term effects of SHS	Low
Quit Yet	Q2 2004	Cessation	Statewide	Humor, entertainment	Low
Clean Indoor Air Testimonials for Business	Q3 2004	SHS	Local	Personal testimony	Low
Heather Crowe	Q3 2004 Q4 2004	SHS	Local	Personal testimony, long- term effects	High
CIAA Testimonials in Mall	Q3 2004	SHS	Local	Personal opinions	Low
Paul Decker	Q3 2004	SHS	Local	Personal testimony, long- term effects of SHS (lung cancer)	High
Quitting Is Hard	Q3 2004 Q4 2004	Cessation	Local	Personal testimony	Low
Smoke Free New York	Q3 2004	SHS	Local	Child endangerment	Low
Judy Dying	Q3 2004	Cessation	Local	Personal testimony, long- term health effects of smoking	High
Bob Quits	Q4 2004 Q1 2005	Cessation	Local	Contemporary analogy to Reality TV but with dire consequences	Low
Every Cigarette Does You Damage	Q1 2005 Q2 2005	Cessation	Local	Graphic images of internal physical damage	High
I Need You	Q1 2005	Cessation	Community Partner	Who will teach your children when you are dead because you smoked	High

#### Exhibit 2-4b. NYSDOH- and Community Partner-run Statewide Antismoking Television Advertising in New York, Q2 2004-Q1 2005

Title	Time	Goal Area	NYSDOH/ Community Partner	Message Strategies	Emotion/ Impact
Pam Laffin (Abuse)	Q1 2005	Cessation	Community Partner	Graphic images and consequences of long time use	High
Pam Laffin (Krystell)	Q1 2005	Cessation	Community Partner	Family guidance of what not to do	High
Pam Laffin (Last Goodbye)	Q1 2005	Cessation	Community Partner	Emotional appeal with family angle	High
Pam Laffin's Kids	Q1 2005	Cessation	NYSDOH	Emotional appeal with family angle	High
Clinical	Q2 2005	SHS	NYSDOH	Graphic images and consequences of breathing SHS	High
Heather Crowe	Q2 2005	SHS	NYSDOH	Personal testimony, long-term effects	High
One Lung	Q2 2005	SHS	NYSDOH	Emotional appeal with family angle	High
I Smoke When I'm Coloring	Q2 2005	SHS	NYSDOH	Family endangerment	Low
Careful Dave	Q2 2005 Q3 2005	SHS	Community Partner	Chemical dangers of SHS	Low
Careful Tim	Q2 2005 Q3 2005	SHS	Community Partner	Chemical dangers of SHS	Low
Careful Kevin	Q2 2005 Q3 2005	SHS	Community Partner	Chemical dangers of SHS	Low
Breeding Ground	Q2 2005	Social Acceptability	Community Partner	Industry manipulation	High
Ethnic Targeting	Q2 2005	Social Acceptability	Community Partner	Industry manipulation	High
Reverse Psychology	Q2 2005	Social Acceptability	Community Partner	Industry manipulation	High

The program has also sustained its focus on messages that highlight the dangers of secondhand cigarette smoke. A number of advertisements, such as "Clinical," "Heather Crowe," and "One Lung," were broadcast statewide during the second quarter of 2005. Unlike SHS messages NYSDOH has used in the past, these ads use intense images and strong emotional appeals to depict the physical and emotional consequences of exposure to SHS. Data on confirmed awareness of and reactions to these ads were captured in the Q2 2005 ATS, which RTI will analyze as these data become available.

Local-level advertising has also used more intense, emotionally-laden messages, such as the "Every Cigarette Does You Damage" campaign that aired locally in western New York during the first quarter of 2005. This campaign features graphic images of internal physical damage that occurs because of smoking. A number of other locally aired advertisements, such as "Judy Dying" and "Paul Decker," which aired during the third and fourth quarters of 2004, also used strong emotional appeals through personal testimonies about the long-term health effects of smoking, including lung cancer and death. Many of these advertisements also include taglines promoting the New York State Smokers' Quitline, providing a resource for smokers who need assistance in quitting.

In the 2004 IER, we noted that many stakeholders indicated that the media campaign should have been coordinated with other aspects of the program and that the messages should arouse stronger emotional responses to be effective. The stakeholders further indicated that NYTCP did not have sufficient control over the media campaign to select advertisements and coordinate them with the Quitline and other program efforts. Our assessment of the media campaign was consistent with that of the stakeholders. Since the 2004 IER, it appears that NYTCP has made significant progress in addressing these concerns by using emotionally-laden advertisements that are coordinated with other program activities, such as the New York State Smokers' Quitline. Given these efforts, we expect to observe an overall increase in statewide awareness of antismoking advertising. In subsequent sections, we assess the extent to which awareness of antismoking media has changed since the 2004 IER by examining data from the ATS.

**Remaining Gaps in Planning and Implementation**. Although NYTCP appears to have made significant strides in addressing the criticisms of mass media efforts in the 2004 IER, gaps in planning and implementation remain. As noted above, the program missed a key opportunity to coordinate media activities with the ASP initiative during April, May, and June 2005. After initially approving the production and concepts underlying the NYTCP-created "Walk to School" and "Convenience Store" ads, NYSDOH pushed for changes to the conceptual content of these ads, resulting in production delays. This ultimately led to the launch of ASP-related community press events and advertising without the support of statewide media created by NYTCP as well as the complete absence of the unifying tagline "Now you know," which was intended to be associated with other NYTCP-sponsored advertising. Although the "Walk to School" and "Convenience Store" ads are now in production, they will likely not air until next year. Furthermore, we note an approximate 6-month gap in statewide antismoking advertising that occurred during the third and fourth quarters of 2004 because of contract delays for the Community Partners and the statewide media buying contract.

Another gap in the NYTCP Tobacco Control Media Plan is the lack of significant youthtargeted media in support of Goal 4, which aims to prevent initiation of tobacco use among youth and young adults. Four youth prevention ads aired in Q2 2005 (three NYSDOHcreated and one from another state), and three aired in 2002. Without a sustained effort over time, it is unclear what, if any, impact these isolated efforts will have. Evidence from statewide and national antismoking media evaluations suggests that sustained youthtargeted campaigns with strong antitobacco industry messages are effective in changing youth attitudes, beliefs, intentions, and behaviors related to smoking. For example, data from the Florida Anti-tobacco Media Evaluation (FAME) showed that the Florida "TRUTH" campaign's use of counterindustry messages led to high rates of campaign awareness, changes in behavior-related attitudes and beliefs, and lower rates of youth smoking (Sly et al., 2001). Similar findings have been reported from evaluations of the American Legacy Foundation's (Legacy's) national "truth" campaign (Farrelly et al., 2002, 2005). During the past 5 years, Legacy has devoted significant resources to its national "truth" campaign, which has decreased the importance of state-level youth prevention messages. However, Legacy's funding is declining, limiting the reach of the "truth" campaign. Given the available evidence on the effectiveness of well-executed youth media campaigns and decreasing funds for the national "truth" campaign, RTI recommends increased investment in youth-targeted antismoking media campaigns to the extent that adequate resources are available. In light of the program's programmatic priorities, investing significantly in youth-targeted media would require that additional resources be allocated to the program.

Finally, although NYTCP has responded to stakeholder concerns by developing a detailed Media Plan, the plan focuses primarily on long-range goals and does not incorporate any short-term indicators of campaign success. The development of short-term goals and indicators ensures more timely feedback on how media messages resonate with intended target audiences, allowing campaign planners to implement intermediate course corrections in media strategies where needed. Intermediate indicators of campaign success should be developed by using simple conceptual models of behavior change, such as the Theory of Reasoned Action (Fishbein and Ajzen, 1975) and the Health Belief Model (Rosenstock, 1974), which dictate that changes in attitudes, beliefs, and intentions precede behavior changes. Moving forward, the program should update its planned media activities to include shorter-term indicators of success.

### Multicomponent Smoking Cessation Quitline

In the 2004 IER, we found that customer satisfaction with the Quitline was high and that since its implementation in 2000, the Quitline has steadily enhanced its array of services. We also noted that the program had plans to begin offering NRT starter kits through the Quitline and provide one to four scheduled counseling calls to eligible smokers ready to quit. The starter kits were available to Quitline callers beginning in December 2004. A total of \$2.6 million is dedicated to this effort over a 1-year period. Given the available number of kits, the program has (by design) only implemented limited promotion of this option through print advertising in May and June.

### **Community Partners**

By the time of the 2004 IER, we had not yet completed our evaluation systems for NYTCP's Community Partners and hence could not address issues of program implementation. Since that time, we have developed and implemented the Community Activity Tracking (CAT)

system and completed our case study of Community Partners. We describe both of these below.

**Community Activity Tracking System.** The CAT data collection system is a Web-based tool designed to facilitate program monitoring for NYTCP and to enable standardized report preparation for funded NYTCP partners. These partners—Cessation Centers, Community Partnerships, and Reality Check Youth Action Partners—record their annual work plans and monthly progress reports online. CAT was launched in December 2004.

CAT is organized based on the NYTCP Strategic Plan goals and objectives and by "strategy" and "focus area." Partners enter their Annual Plans one strategy at a time. A strategy is an activity or group of activities associated with one specific goal, objective, and focus area. A strategy may be an event, campaign, or several related activities. "Focus areas" are cross-cutting functional categories that provide some general description of the type of activities that each strategy involves. For example, a strategy that uses paid media to disseminate a message is different from a strategy that advocates for policy change with school administrators. The types of questions asked on progress reports are specific to the focus of the tobacco communication, whereas paid media reports address target audience and communication channel). Exhibit 2-5 provides descriptions and examples of the focus areas:

- Government policy-maker education
- Paid media
- Community education
- Monitoring or assessment of organizational policies and practices
- Survey of public's knowledge, attitudes, beliefs, or behaviors
- Provision or promotion of cessation services
- Advocating with organizational decision makers
- Infrastructure development

The CAT system (a) allows Community Partners to efficiently document their strategies and the immediate outputs of those strategies and (b) will allow NYTCP staff at various levels to review any partners' specific plans or strategy reports and to call up reports aggregating data for an individual partner or across multiple partners (e.g., by partner type, geographic area, specific time period). Every month, partners provide progress reports ("Monthly Strategy Reports") that provide details about the activities conducted under each strategy. For example, for Paid Media, the reports describe the target audience, the medium (e.g.,

Focus Area	Description of Activities Under Focus Area
Government policy-maker education	This focus area involves educating local, state, regional, or national policy makers about tobacco issues and the implications of policy change. <i>Examples:</i>
	<ul> <li>Meeting with New York State legislators to inform them of the existing NYTCP activities and the need for ongoing funding</li> <li>Writing letters to elected officials</li> </ul>
	Teens speaking at legislative sessions on issues facing their group
Paid media	The primary purpose of paid media is to educate the public or a subgroup of the public. This includes education about, and promotion of, cessation services. This does not include paid media merely to announce or promote an event. This <u>does</u> include media "donated" as part of a purchase plan (e.g., two for one). <i>Examples</i> :
	Radio advertisement targeting youth smoking
	Theater slide
	Public service announcement (PSA)
	<ul> <li>Mass mailings</li> <li>TV advertisements</li> </ul>
Community education	<ul> <li>The purpose of community education is to educate the public (or subsets of the public) about tobacco control issues with the intention of influencing individual opinions, beliefs, and behaviors. This focus area includes not only discrete "events" but also information dissemination of various types (although not mass mailings, which are classified as a type of paid media).</li> <li><i>Examples:</i> <ul> <li>Information dissemination in community venues</li> <li>Press event regarding launching an initiative or on assessment findings</li> <li>Hosting a forum/event with a tobacco control focus</li> <li>Movie Stomp</li> </ul> </li> </ul>
Monitoring or assessment of organizational policies or practices	<ul> <li>In this focus area, Partners develop program strategies based on findings. Analysis of secondary data for the same purpose should be included. Target organizations might include businesses (e.g., bars, restaurants, tobacco retailers, health insurers), schools, and community organizations.</li> <li><i>Examples:</i> <ul> <li>Interviews with administrators at health care settings to assess implementation of tobacco user identification and screening systems</li> <li>Observing retailers who sell tobacco</li> </ul> </li> </ul>
Survey of public's knowledge, attitudes, beliefs, or behaviors	<ul> <li>Partners periodically conduct formal assessments of the public, or a sub-group, to determine public (individual) knowledge, attitudes, beliefs, and self-reported behaviors concerning tobacco-related issues, with the objective of developing program strategies based on findings.</li> <li><i>Examples:</i> <ul> <li>Interviews with youth about antismoking ads</li> <li>Telephone surveys about household tobacco use</li> <li>Interviews with members of the public about their support for CIAA laws</li> </ul> </li> </ul>

#### Exhibit 2-5. CAT Description of Activities by Focus Areas

(continued)

Focus Area	Description of Activities Under Focus Area
Provision or promotion of cessation services	<ul> <li>This focus area involves providing cessation services (if Cessation Center) or promoting cessation services that are provided by other agencies or organizations.</li> <li><i>Examples</i>: <ul> <li>Promoting availability of NRT through the Quitline</li> <li>Distributing promotional materials to pharmacies/clinics</li> <li>Promoting Medicaid-funded cessation services</li> </ul> </li> </ul>
Advocating with organizational decision makers (Cessation Centers)	<ul> <li>This focus is specific to Cessation Centers and entails influencing organizational decision makers to change their organizations' policies, programs, or practices.</li> <li><i>Examples</i>: <ul> <li>Providing technical assistance to hospitals to encourage adoption of clinical guidelines for cessation</li> <li>Advocating for change with health care provider organizations to create and improve systems to identify and treat tobacco users</li> <li>Training health care providers to promote the Fax-to-Quit program</li> </ul> </li> </ul>
Advocating with organizational decision makers (Community Partnerships and Reality Check Youth Action Partners)	<ul> <li>This focus area is unique to Community Partnerships and Reality Check Youth Action Partners to influence organizational decision makers to change their organizations' policies, programs, or practices.</li> <li><i>Examples:</i> <ul> <li>Assisting community organizations with implementing policies prohibiting tobacco sponsorship</li> <li>Conducting interventions with retailers to reduce point of purchase advertising</li> <li>Working with school boards to eliminate magazines containing tobacco advertising from school libraries</li> </ul> </li> </ul>
Infrastructure development	<ul> <li>All Partners mobilize and organize resources to enhance their effective implementation of tobacco control strategies.</li> <li><i>Examples</i>: <ul> <li>Developing clear staff roles within NYTCP</li> <li>Organizing trainings for Partner staff and volunteers</li> <li>Reality Check activities focused on recruiting new youth members</li> </ul> </li> </ul>

Exhibit 2-5. CAT Description of Activities by Focus Areas (continued)

television, radio), and the content of the messages; for community education events, partners describe the setting, target audience, collaborators, and the number of people in attendance. Given the limited data on activities at the time of this report, we chose to report partners' strategies or planned activities to illustrate how they are focusing their efforts. Although the strategies do not necessarily accurately reflect the level of effort required to complete each strategy, we feel they do provide a reasonable impression of how partners are spending their time across programmatic goals and across focus areas. Future reports will summarize data from the Monthly Strategy Reports and will attempt to reflect the level of effort (and/or funding) that each activity represents. By systematically collecting data on partner activities, RTI can better evaluate the implementation of partner activities and the program can better manage its funded Community Partners.

As an example of CAT's capabilities, Exhibit 2-6 shows how the Partners' strategies are distributed across the program's four programmatic goals and two capacity-building goals (Goal 5: Build and maintain an effective tobacco control infrastructure, and Goal 6: Contribute to the science of tobacco control). For the period 2004–2005, Community Partners' planned activities focused most on decreasing the social acceptability of tobacco use, followed by reducing exposure to SHS and promoting cessation. Reality Check Youth Action Partner strategies were predominantly focused on decreasing the social acceptability of tobacco use. Although the Program's philosophy dictates that youth smoking initiation will be curbed primarily indirectly by reducing the social acceptability of tobacco use and reducing adult tobacco use, it is striking that only 5 percent of planned strategies across all partners are aimed at reducing smoking initiation.

		Goals					
Partner Type	1	2	3	4	5	6	Total
Cessation Center (N=19)	5	5	160	0	11	3	184
	3%	3%	87%	0%	6%	2%	100%
Community Partnerships (N=29)	185	258	142	9	101	16	711
	26%	36%	20%	1%	14%	2%	100%
Joint Strategy	1	18	5	2	0	0	26
	4%	69%	19%	8%	0%	0%	100%
Reality Check Youth Action	150	534	21	78	211	31	1,025
Partners (N=46)	15%	52%	2%	8%	21%	3%	100%
Total	341	815	328	89	323	50	1,946
	18%	42%	17%	5%	17%	3%	100%

Exhibit 2-6. Number of Community Partner Strategies by Goal and Partner Type

Exhibit 2-7 shows the number of strategies in several of the focus areas by partner type. Both Reality Check Youth Action Partners and Community Partnerships use the focus area of "community education" most frequently to work toward their objectives, and Cessation Centers use the focus areas "advocating with organizational decision makers" and "provision or promotion of cessation services" most often.

**Sentinel Site Study.** In summer 2004, before the new Community Partner contracts were in place, RTI conducted a case study of selected New York counties that have been implementing tobacco control initiatives for a number of years. The purpose of this study was to understand the context within which tobacco control has been operating and to inform NYTCP about local characteristics that have enabled or prevented past successes or are likely to impact future local accomplishments. The selected counties serve as "sentinel sites," providing a first look at how tobacco control programs operate within the local context. Within these counties, we gathered detailed information about the historical and

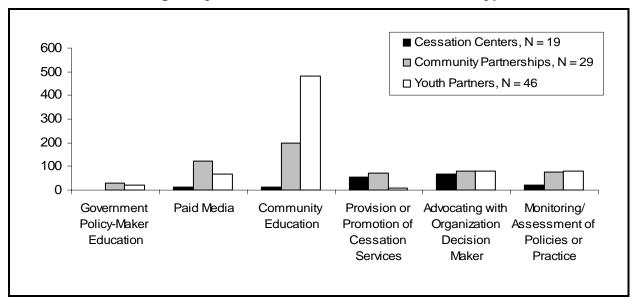


Exhibit 2-7. Strategies by Selected Focus Areas and Partner Type

political context within which local tobacco control efforts have operated, with the goal of understanding how these factors may influence future efforts.

The decision to use a case study as a research design was largely driven by the research questions of interest. The major focus of this study was to explore the how and why of local tobacco control efforts and to understand how differences in local context may influence these efforts. To that end, we selected five counties in which to obtain an in-depth understanding of the following:

- Health status of the community related to tobacco control and other public health issues
- History of addressing tobacco use and related behaviors or diseases
- Barriers the community has experienced in addressing tobacco control
- Opportunities the community has identified in developing tobacco control initiatives
- Lessons learned about the most advantageous structure and partners to involve in local initiatives

Working collaboratively with NYTCP, we selected the following counties for the study: Erie, Franklin, Jefferson, Oneida, and Westchester.

Data collection measures for this study were drawn from three sources: (1) qualitative interview data collected through local site visits and telephone calls to each county, (2) data obtained through other components of the comprehensive evaluation for NYTCP, and (3)

secondary data sources. In the primary data collection for this study, three groups of individuals were contacted to provide input: Community Partnership coordinators and current Community Partnership members; local political leaders, including each County Executive; and staff from the local health department, including the Health Commissioner/ Director. Data from these sources, including 39 interviews conducted across the five counties, were then analyzed through a rigorous process to ensure valid and reliable findings.

A number of important conclusions were drawn from the five counties in terms of contextual factors that influence how tobacco control is implemented and how effective tobacco control efforts prove to be. The following provides a brief overview of the conclusions drawn from Phase I of the sentinel site study:

- The local historical and political contexts across the five counties were quite varied and seemed to impact tobacco control efforts as follows:
  - A rich history in tobacco control did not necessarily translate into a supportive political context. Counties that had been actively working in tobacco control since the late 1980s often experienced negative reactions to their efforts to the same degree as counties with a shorter history in this area.
  - Political context is extremely important to what a Community Partnership is able to achieve. In all five counties, the political context set the tone for the community, both in how resistant people would be in accepting new policies and in how the Community Partnership would operate in this context.
  - The local environment and the priorities for tobacco control are regularly changing, requiring the Community Partnership to quickly shift in its approach to delivering interventions.

A number of notable conclusions can be drawn about the characteristics of the Community Partnerships that appear to facilitate effective local tobacco control:

- Location and physical presence of the Community Partnership within the boundaries of a county seems to influence how well a Community Partnership can impact local tobacco control.
- Having a formal "partnership" like the Community Partnerships does not necessarily mean that collaboration across partners is taking place. In many instances, the Community Partnership seemed to operate as a clearinghouse for information on tobacco control, instead of developing and implementing its own initiatives.
- Because there was no programmatic requirement for Community Partnerships and Reality Check Youth Action Partners to develop joint initiatives, we found little evidence of significant collaboration. Although the Community Partnerships had generally supported Reality Check efforts and included their coordinator in meetings, there was no evidence of any Community Partnership working with Reality Check to plan and implement a joint initiative. Beginning with the new contracts for Community Partners in late 2004, there is one manager for all partners within each of NYTCP's eight program areas, rather than separate managers for Reality Check and Community Partnerships. This change in management helps foster collaboration

across partners. More recent data from the CAT system indicate that there is more extensive planning and joint strategies between Community Partnerships and Reality Check Youth Action Partners.

 Maintaining a positive and productive relationship with the local health departments appears to be critical to the ongoing success of the Community Partnership but was difficult to achieve. Because the health departments are a component of the executive branch of each county government, they were often in the position of following the lead of the County Executive, even when it was counter to tobacco control efforts.

Findings indicated that the relationship between each Community Partnership and NYSDOH, while very strong in some places, could be improved. Input from the Community Partnerships included the following:

- Community Partnership members were concerned about what they perceived to be a shift in NYTCP priorities away from more local control of activities. The state has developed statewide initiatives, such as ASP, that require the participation of Community Partnerships and Reality Check Youth Action Partners. However, findings from this study suggest that Community Partnerships are more focused and productive when they are participating in specific initiatives. In addition, impressions we have gathered from Community Partnerships since the time of the sentinel site study indicate that there is enthusiasm for ASP, as it makes Community Partnerships feel as though they are part of a larger initiative that has the potential to have an impact statewide.
- Respondents noted that NYTCP uses a "top down" model to implement local tobacco control efforts and characterized this as a "cookie cutter" approach. Many expressed the desire for NYTCP to provide support and guidance for local tobacco control efforts but also to allow more flexibility in what activities communities undertake. The program has responded by investing greater resources into training for local tobacco control efforts by establishing a Tobacco Control Training contract that will provide training services to the staff of 135 local tobacco control partners through regional, subregional, and statewide training opportunities.
- Communication between the state and Community Partnerships could be improved. Misperceptions of the shift in NYTCP's focus were apparent and could be addressed through enhanced communication. This issue has been actively addressed by NYTCP since this study by convening meetings more regularly with the Community Partnerships and Area Managers, but it is unknown what impact this has had on the Community Partnerships' understanding of NYTCP priorities.

#### Enforcement of ATUPA

We observed that the levels of tobacco retailer compliance with ATUPA fell far short of what is needed to reduce access to cigarettes and curb youth smoking. However, in light of the evidence base, we did not recommend increasing funding for enforcement. Given the statutory requirement to "direct the most efficient allocation of state resources. . . to accomplish the maximum prevention and reduction of tobacco use among minors and adults," we could not support additional investment in enforcement activities.

#### **Other Program Components**

In 2004–2005, the program continued to actively build its capacity by releasing additional requests for applications (RFAs) and requests for proposals (RFPs). In May 2004, NYTCP issued an RFP for Tobacco Control Training Services. The purpose of this RFP was to establish a contract to provide training services to the staff of the 135 local tobacco control partners through regional, subregional, and statewide training opportunities. Training topics will include project management, public speaking, and a wide variety of tobacco control issues. The program awarded a 5-year contract to Cicatelli Associates of New York City for \$480,000, however, the contract had not yet been executed as of August 2005.

On February 2, 2005, NYTCP released the Promising Tobacco Control Interventions RFA, and applications were due April 2005. The purpose of this effort is to fund projects that will explore the effectiveness of promising, but unproven, tobacco control interventions. Contracts have not yet been awarded. The Promising Interventions RFA requires that projects include a rigorous evaluation component to demonstrate effectiveness. As a result, RTI will not evaluate these projects.

On February 23, 2005, the program released the Tobacco-free Schools Support Programs RFA and received 40 applications on May 26, 2005. The purpose of this RFA is to establish programs that will provide technical assistance and training to school districts across the state on the formulation and implementation of tobacco-free school policies that meet the requirements of state and federal law. Technical reviews of the applications were completed during the week of June 20, and the program made funding recommendations in early July, 2005. The funded school partners will conduct similar work across the state, and RTI will modify the CAT system to capture activities performed by these new partners. Baseline data collection is scheduled for spring 2006.

#### 2.2.3 Addressing Programmatic Goal-Oriented Evaluation Findings

In addition to findings and recommendations that pertain to the quality of the program's strategic approach and implementation of tobacco control interventions, we presented findings in the 2004 IER from analyses of existing evaluation data systems. These analyses addressed the four primary programmatic goals and pointed out gaps in knowledge and other opportunities for the program to adjust its strategies. In this section, we revisit these findings and discuss any changes the program has made to address these findings.

#### Goal 1: Eliminate Exposure to Secondhand Smoke

Exhibit 2-8 summarizes our findings and recommendations from the 2004 IER as they pertain to Goal 1. Our primary conclusion in the 2004 IER was that compliance with the statewide CIAA was high soon after the law took effect on July 24, 2003. However, we noted that compliance in bars lagged behind other affected venues and that continued compliance monitoring was warranted. In addition, our findings indicate that although only

Goal 1: Eliminate exposure to secondhand smoke.		
Finding	Recommendation	
Approximately 10 percent of workers reported exposure to SHS despite the fact that the CIAA prohibits smoking in virtually all workplaces.	Identify workplaces where 10 percent of workers continue to be exposed to SHS to explore where and why this exposure continues.	
Compliance with the CIAA was generally high soon after implementation; however, compliance in bars lagged behind other venues.	Continue to monitor compliance, especially in bars.	
The CIAA appeared to have no adverse economic data based on the available measures (sales tax receipt data for bars and restaurants were not available at the time).	To gain a more thorough understanding of the economic impact of the law, examine sales tax data to understand the impact of the CIAA on businesses.	
Exposure in homes and cars is now the primary source of exposure to SHS.	Programmatic efforts should increasingly focus on educating New Yorkers about the dangers of SHS to promote voluntary restrictions on smoking in homes and cars. Countermarketing efforts are one such strategy to promote these restrictions and to increase New Yorkers' understanding of the health risks associated with exposure to SHS. Research should explore the factors associated with voluntary restrictions on smoking in these settings to understand how the program can engage in activities that promote these restrictions.	
Youth reported higher rates of exposure to SHS.	Examine the 2004 YTS data to understand the possible effects of the CIAA on youth exposure to SHS.	
Data suggest that New Yorkers did not fully understand all of the risks associated with exposure to SHS, especially the risk of heart disease and sudden infant death.	NYTCP efforts to eliminate exposure to SHS should focus on educating New Yorkers about the dangers of SHS to promote voluntary restrictions on smoking in homes and cars.	

Exhibit 2-8. 2004 IER Findings and Recommendations for Goal 1

10 percent of workers reported exposure to SHS, this level was higher than expected considering the comprehensive CIAA that prohibits smoking in virtually all workplaces. We recommended that future evaluation of the public health impact of the CIAA should focus on identifying workplaces where workers continue to be exposed to SHS to explore where and why this exposure continues.

Our analyses also suggested that the CIAA was not having an adverse economic effect on the hospitality industry, although key indicators of economic impact, such as sales tax receipt data (a measure of economic activity), were not available at the time. We recommended analyzing these data more fully to understand the impact of the CIAA on businesses that may be potentially affected (positively or negatively), such as bars and restaurants. Our research found that exposure in homes and cars is now the primary source of exposure to SHS. Thus, we recommended that programmatic efforts should focus increasingly on promoting voluntary restrictions on smoking in homes and cars.

Analyses in the 2004 IER also suggested that New Yorkers did not fully understand all of the risks associated with exposure to SHS, especially the risk of heart disease and sudden infant death. We also found that youth reported higher rates of exposure to SHS, and we recommended examining the 2004 Youth Tobacco Survey (YTS) data to understand the possible effects of the CIAA on youth exposure to SHS.

**Response to Recommendations.** With respect to continued monitoring of compliance, the program discontinued direct observation of compliance 1 year after the CIAA went into effect. However, NYTCP can rely on data from the New York ATS to provide indirect measures of compliance with the CIAA in bars and restaurants. The analyses presented below illustrate if compliance has remained at relatively high levels.

We also recommended examining sales tax data to understand the impact of the CIAA on businesses. In response to a request by state legislators, the Office of Tax Policy Analysis in the Department of Tax and Finance conducted an analysis of sales tax receipt data, which we present in Chapter 4.

Our description of countermarketing efforts above demonstrates that the program is actively addressing the recommendation to focus on exposure to SHS in homes and personal vehicles.

Finally, analyses of the 2004 YTS on exposure to SHS are presented in Chapter 5 and will illustrate changes in self-reported exposure to SHS after implementation of the CIAA.

#### Goal 2: Decrease the Social Acceptability of Tobacco Use

Exhibit 2-9 summarizes findings and recommendations from the 2004 IER as they pertain to Goal 2. There were three primary findings: tobacco advertising and promotions are ubiquitous, and the tobacco industry exposed New Yorkers to an estimated \$830 million in advertising and sponsorships; countermarketing efforts, when active, only reached one third of New Yorkers; and there are several knowledge gaps illustrated by data from the New York ATS. We recommended that NYTCP aggressively combat tobacco advertising and promotions; that they strive to reach 60 percent of New Yorkers with their countermarketing efforts; and that they consider addressing smokers' knowledge gaps, particularly around misperceptions of the benefits of low-tar or light cigarettes.

Goal 2: Decrease the social acceptability of tobacco use.		
Finding	Recommendation	
New York youth and adults are frequently receiving and/or exposed to advertisements and promotions from the tobacco industry. We estimated that the industry exposed New Yorkers to \$830 million of advertising and promotions in 2002. For example, 40 percent of adult smokers received gifts or special offers, and 50 percent received a special price offer. In addition, 70 percent of youth indicate frequently being exposed to advertising in retail outlets.	Redouble efforts to counter ubiquitous tobacco marketing and promotions, including combating the influence of smoking in the movies. Invest more aggressively in effective countermarketing, community education, and specific interventions to reduce, eliminate, or otherwise address tobacco company marketing efforts.	
Only one third of New Yorkers recalled seeing specific NYTCP advertisements in the second quarter of 2004, when eight advertisements were on the air.	Set a goal of awareness of specific NYTCP advertisements of 60 percent of New Yorkers. Countermarketing efforts should include messages consistent with best practices and should be planned far enough in advance to permit coordination with other program efforts, such as community mobilization. Longer-term planning for countermarketing efforts will also aid the evaluation because it will permit us to modify the ATS and other surveys to include knowledge and attitude questions that are consistent with the targeted media messages.	
Smokers' knowledge and understanding of the health risks of tobacco is inadequate. More than half of smokers overstate the benefits of low-tar or light cigarettes; nearly one quarter fail to recognize that smoking increases the risk of lung cancer; and one third underestimate the benefits of cessation.	Address these significant knowledge deficits and misperceptions with countermarketing and other efforts to correct gaps in knowledge.	
Findings also indicate widespread support (70 percent) among adults for not allowing smoking in movies rated G, PG, and PG-13, and nearly two thirds believe that smoking in the movies encourages youth smoking. More than half of middle and high school students report frequently seeing smoking in the movies.	NYTCP's Smokefree Movie Initiative should continue as it may have raised awareness of this issue. It is a well-placed program priority, given the exposure of youth to smoking in movies and the impact of that exposure on youth initiation.	
We found a relatively low level of awareness of specific NYTCP advertisements; only half of adults recall hearing or seeing messages about "places to get help in quitting."	Implement additional activities to promote the Quitline and other services for smokers who want to quit.	

#### Exhibit 2-9. 2004 IER Findings and Recommendations for Goal 2

**Response to Recommendations.** NYTCP has undertaken a number of activities that are consistent with our recommendations. First, the program launched the ASP initiative, aimed at reducing retail tobacco advertising and promotions; periodical advertising; sponsorship and corporate giving; and promotion in movies, adult facilities, and through the mail in New York State. Second, as described above, the program has made significant strides to improve its countermarketing efforts. Although the program has not begun to develop a strategy to correct the misperceptions of the benefits of low-tar cigarettes, this recommendation was not tied to a specific time frame, and addressing this knowledge gap is not necessarily a top priority for the countermarketing efforts. Below, we provide more detail about the program's efforts to address tobacco advertising and promotions.

Addressing Tobacco Advertising, Sponsorships, and Promotions. In the 2004 IER, we found that youth and adults in New York are exposed to increasing amounts of tobacco industry advertising and promotions. The most recently available data indicate that the tobacco industry exposed New Yorkers to \$830 million of advertising and promotions in 2002. The 2004 IER findings indicated that youth and adults were receiving and were receptive to these advertisements and promotions, and they are having their intended effect of normalizing and promoting tobacco use. Our findings suggested that the program redouble its efforts to counter ubiquitous tobacco marketing and promotions, including combating the influence of smoking in the movies, and to correct gaps in knowledge and attitudes related to the dangers of smoking, the benefits of quitting and effective quitting strategies, and the role of nicotine in smoking and in quitting. To do this, we recommended that the program invest more aggressively in effective countermarketing; community education; and specific interventions to reduce, eliminate, or otherwise address tobacco company marketing efforts.

In January 2005, NYTCP introduced the ASP statewide initiative to counter the industry's advertising, sponsorship, and promotion of tobacco products in New York communities. The ASP initiative addresses five types of tobacco marketing:

- Point-of-purchase advertising
- Periodical advertising
- Commercial sponsorship and corporate giving
- Smoking and tobacco product placement in movies
- Actions to circumvent the MSA restrictions

Currently, Community Partners' work aims to raise awareness of the extent of tobacco advertising, sponsorship, and promotion in these various settings and the influence it has on youth and adult tobacco use. They also work to build support for the eventual elimination of tobacco advertising at the point of sale, in periodicals, and in movies. **Point-of-Purchase Advertising.** The tobacco industry devotes significant resources to promoting tobacco in retail outlets, with point-of-purchase advertising, price discounts, purchase promotions (e.g., buy two, get one free), and retailer incentives. Partners are assessing tobacco point-of-purchase advertising in their communities, holding press events to announce the launch of various ASP point-of-purchase initiatives, educating community members about the impact of tobacco point-of-purchase advertising, and mobilizing the community to take action against tobacco point-of-purchase advertising. Partners are also conducting tobacco point-of-purchase interventions with retailers to reduce and eliminate point-of-purchase advertising objectives. For example, Exhibit 2-10 illustrates how retailers may respond when Community Partners draw attention to the extent of tobacco advertising in the community. In this case, a local newspaper wrote an article following a Community Partner press release and as a result of the article, a local retailer removed some of their outdoor advertising.

Exhibit 2-10. Retail Advertising Before and After a Community Partner Press Release



**Periodical Advertising.** Cigarette advertising in magazines and newspapers has been a staple of the tobacco industry's efforts to promote smoking for decades. Funded Community Partners will implement activities to reduce tobacco advertising in magazines and newspapers. A number of studies have shown that youth's exposure to cigarette advertising in magazines is a risk factor for smoking (Biglan and Cody, forthcoming). Reality Check Youth Action Partners have taken the lead on this aspect of the ASP initiative, with other

partners playing supporting roles. Reality Check Youth Action Partners are working to decrease advertising in periodicals by

- working with school libraries to conduct assessments of tobacco advertising in magazines,
- holding press events to announce the launch of the magazine initiative,
- educating schools and communities about tobacco advertising in magazines,
- mobilizing schools to take action against tobacco advertising in magazines, and
- using earned and paid media to educate the community about the impact of tobacco advertising in magazines.

Of notable mention is the survey conducted by the Reality Check Youth Action Partners of 223 middle and high schools that documented that more than 70 percent of the school libraries had copies of *Time, Newsweek, People*, and *Sports Illustrated* with tobacco advertising. These findings aided efforts by New York Attorney General Eliot Spitzer and the National Association of Attorneys General in reaching an agreement that was announced on June 20, 2005, with two national magazine publishers to eliminate tobacco advertising from school library editions of four major magazines with high youth readerships. The agreement was reached with Time, Inc. (which publishes *Time, People*, and *Sports Illustrated*) and Newsweek, Inc. (which publishes *Newsweek*). It is not clear, however, how much this will reduce youth's exposure to tobacco advertising in magazines. In addition, it is uncertain how the program's efforts will lead to a significant reduction in youth's exposure to tobacco advertising in magazines, and beliefs.

**Commercial Sponsorship and Corporate Giving.** Partners are also conducting activities to decrease commercial promotions, sponsorship, and corporate sponsorship/giving by the tobacco industry. These activities include

- increasing awareness among community members about the impact of tobacco industry promotion on tobacco use and youth initiation through educational presentations in school and community events and earned and paid media;
- conducting sponsorship/corporate giving interventions with community organizations; and
- identifying tobacco promotional events that take place in bars, fraternities, and "adult only" facilities.

As an example of the last activity, Community Partners are signing up to receive promotional materials from the six major tobacco companies to identify opportunities for interventions in these venues. Partners are also providing positive feedback to organizations by organizing and holding area-wide recognition events acknowledging organizations that have policies prohibiting tobacco commercial sponsorship and corporate sponsorship/giving. **Smoking and Tobacco Product Placement in Movies.** Reality Check Youth Action Partners conduct a number of activities to draw attention to the issue of smoking in the movies:

- Writing letters to members of the Motion Picture Association of America (MPAA), Director's Guild, and Hollywood celebrities
- Distributing "tobacco use alert" flyers at local movie rental stores and inside video cartridges, on pizza boxes, and at various other locations
- Holding smoke-free movie nights to educate teens about smoking scenes in movies
- Calling and visiting movie rental businesses to request smoke-free movies
- Educating community organizations on the issue of smoking in the movies

These efforts are part of a larger national effort that includes other state tobacco control programs, the national Parent Teacher Association (PTA), the American Association of Pediatricians, the American Legacy Foundation, and the Campaign for Tobacco-Free Kids. The short-term goal of these activities is to increase awareness among community members, key opinion leaders, and Hollywood leaders about the impact of smoking in movies on youth initiation and tobacco use. The ultimate goal of these activities is to decrease the number of movies rated G, PG, and PG-13 that contain smoking or tobacco product placement.

Our assessment of the ASP initiative is that it is addressing an important topic—the widespread advertising and promotion of tobacco in movies, the retail environment, and other venues. Youth are widely exposed to cigarette brands and images of people smoking in the movies (Sargent et al., 2001), and recent studies have demonstrated that these images are associated with cigarette experimentation and initiation (Dalton et al., 2003). As described above, Reality Check Youth Action Partners are engaging in efforts to raise awareness of the problem of smoking in the movies in their communities in addition to trying to influence policies in Hollywood. Because this is a new and innovative initiative, we do not have a literature base to indicate how effective these activities (as well as activities by other states and national organizations) may be in pressuring the MPAA to rate movies with smoking "R." However, achieving policy change often takes years, as was the case for smoke-free workplaces. We may, however, observe shorter-term measures of impact, such as the number of schools that have policies to run only smoke-free movies and the percentage of parents who limit the number of movies their children see that contain smoking.

Turning to the aspect of the ASP initiative that aims to reduce the amount of tobacco advertising in the retail environment, one study found that among seventh grade students, experimentation with smoking was 38 percent more likely for those reporting weekly visits to convenience stores and remembering cigarette advertisements (Schooler, Feighery, and Flora, 1996). A similar study showed that even after controlling for a wide range of social influences to smoke, weekly visits to convenience stores were associated with a 50 percent increase in the odds of ever smoking (Henriksen et al., 2004). These studies suggest that reducing youth's exposure to tobacco advertising in retail environments may reduce experimentation with cigarettes. As demonstrated anecdotally above, the ASP initiative has the ability to reduce tobacco advertising in the retail environment. However, it remains to be seen whether NYTCP can reduce youth's exposure to retail tobacco advertising sufficiently to have a meaningful effect on youth smoking. In addition, it is not clear from the literature how much retail tobacco advertising would have to decrease to have an effect on youth smoking.

In summary, we praise the program for implementing a major initiative to combat the pervasive influence of tobacco advertising and promotions. It is not yet certain, however, that this initiative can achieve its stated objectives.

#### Goal 3: Promote Cessation from Tobacco Use

In the 2004 IER, we noted that NYTCP's approach to cessation is well grounded in evidencebased strategies. We also noted that the program made recent enhancements to its approach, with the addition of NRT distribution to the Quitline and the establishment of 19 Cessation Centers. Overall, none of the 2004 IER findings suggested that the program needed to alter its current strategy. The primary constraint in making progress in promoting cessation is having sufficient resources to support the evidence-based strategies. We did present several findings that point out opportunities for the program to invest in additional or complementary efforts (see Exhibit 2-11). For example, fewer than 6 in 10 smokers are aware of the Quitline, suggesting that greater promotion of the Quitline is needed. However, increased promotion of the Quitline would likely lead to demand that the program cannot currently support. In addition, if we find (when 12-month follow-up data are available) that the program's distribution of NRT via the Quitline leads to higher rates of successful smoking cessation, the program will need additional resources to reach a significant proportion of smokers who are prepared to quit.

We also found that substantial numbers of New York smokers are using cessation strategies that are not optimal or may even be counterproductive (e.g., switching to light cigarettes). To address this knowledge gap, we recommended informing smokers about effective cessation strategies through media messages, the Quitline, and Community Partners.

With respect to health care provider encouragement of smoking cessation, we found that among smokers who visited a health care provider in the past year, 88 percent were asked if they currently use tobacco and 71 percent were advised to quit. At the time of the 2004 IER, NYTCP had already begun establishing 19 Cessation Centers that will encourage greater involvement of health care providers in smoking cessation. The Cessation Centers will

Goal 3: Promote cessation from tobacco use.		
Finding	Recommendation	
Our findings identified clear gaps in smokers' knowledge of effective cessation strategies (e.g., 11 percent reported switching to light cigarettes).	We recommended disseminating information about effective cessation strategies through media messages, the Quitline, and Community Partners.	
Less than 6 out of 10 smokers are aware that New York has a Quitline.	We recommended increasing efforts to promote the Quitline if supported by additional program resources.	
Our findings identified a low rate of successful cessation among those who attempt to quit.	We recommended adding resources to the program so that it can serve additional smokers via the Quitline (beyond 6 percent of smokers) and increase the effectiveness of smokers' quit attempts with NRT by increasing efforts to expand the availability of free or low-cost NRT to the population.	
Less than half of smokers were advised by a health care provider to quit.	This finding validates the program's investments in the 19 Cessation Centers that will promote the adoption of reminder and other systems within health care provider organizations, designed to encourage providers to consistently support smokers' efforts to quit by providing cessation advice and assistance.	
Medicaid recipients were less likely to be successful at maintaining a cessation attempt than other adults. This result is important because smoking rates are higher in lower- income populations.	We recommended the program continue efforts to increase the use of NRT, increase awareness of cessation-related media messages, increase insurance coverage for NRT, and increase employer support for cessation services for employees.	

#### Exhibit 2-11. 2004 IER Findings and Recommendations for Goal 3

accomplish this by providing technical assistance and support for putting systems in place that will screen all patients for tobacco use and prompt providers to offer advice to quit to those who use tobacco. Thus, among smokers who visit a health care provider, we expect to see a greater percentage reporting being asked if they use tobacco and advised to quit. However, the Cessation Centers will only have an impact on the 62 percent of smokers who visit a health care provider.

Finally, with respect to the Medicaid population, our data indicated that although a greater proportion of Medicaid recipients reported having made a quit attempt in the past 12 months than non-Medicaid recipients, Medicaid recipients were less successful in maintaining quit attempts. This result is important because smoking rates are higher in lower-income populations. It also validates the program's objective to promote cessation among low-income smokers. It is important to note that Medicaid does not currently support counseling for smoking cessation, an evidence-based strategy that could lead to more effective quit attempts for this population.

**Response to Recommendations.** In light of the recent enhancements to cessation efforts, such as the 19 Cessation Centers and the distribution of NRT via the Quitline, NYTCP is adequately addressing our key recommendations from the 2004 IER.

#### Goal 4: Prevent Initiation of Tobacco Use Among Youth and Young Adults

NYTCP's overall programmatic approach to reducing smoking initiation among youth and young adults involves influencing community and adult norms that in turn affect youth smoking behavior. This approach recognizes the strong link between youth smoking and social normative influences, such as peer and parental smoking, the glamorization of smoking in the movies, and other contextual factors. These contextual dimensions are focal points of other NYTCP goals and objectives as outlined in the Strategic Plan whereby all initiatives undertaken by NYTCP in every other goal area are expected to have an impact on youth and young adult smoking. For example, eliminating exposure to SHS (Goal 1), decreasing the social acceptability of tobacco use (Goal 2), and promoting smoking cessation (Goal 3) are expected to encourage the adoption of negative attitudes toward tobacco, reduce and denormalize tobacco use among adults, and contribute to the prevention of smoking initiation among youth and young adults.

In addition to these more indirect routes to influencing youth smoking, the program established two strategies within Goal 4 that involve activities that have the potential to have more direct effects: increasing cigarette prices by increasing cigarette excise taxes and increasing statewide retailer compliance with ATUPA, which restricts youth access to tobacco. The literature shows a strong influence of price on youth smoking, but it is not clear how the program can successfully increase low cigarette excise taxes.

Findings from the 2004 IER focused on youth access. Exhibit 2-12 summarizes findings and recommendations from the 2004 IER as they pertain to Goal 4. The findings demonstrated that despite several years of increased enforcement activity of youth access laws, New York youth are no more likely than youth in the rest of the United States to be asked for proof of age while purchasing cigarettes or to be refused cigarettes because of age. In total, the evidence suggests that current efforts to enforce youth access laws may not be sufficient to curb youth access to cigarettes or to reduce youth tobacco use. In light of the available data and the state of the literature on youth access enforcement, we found that current enforcement efforts may not be sufficient to curb youth access to cigarettes or to reduce youth tobacco use. The literature suggests that retailers need to be monitored four to six times per year—much more than the annual compliance checks currently in place—to curb youth access to tobacco effectively. In light of the evidence for the effectiveness of youth access enforcement and the likely opportunity cost of investing additional available resources in enforcement, we did not recommend increased enforcement effort. As a result, we did not have specific recommendations for Goal 4 from the 2004 IER.

Goal 4: Prevent initiation of tobacco use among youth and young adults.		
Finding	Recommendation	
Despite several years of increased enforcement activity of youth access laws, New York youth are no more likely than youth in the rest of the United States to be asked for proof of age while purchasing cigarettes or to be refused cigarettes because of age.	The literature suggests that retailers need to be monitored four to six times per year, much more than the annual compliance checks currently in place. However, in light of the evidence base, we did not recommend increasing funding for enforcement. Given the statutory requirement to "direct the most efficient allocation of state resources to accomplish the maximum prevention and reduction of tobacco use among minors and adults," we could not support additional investment in enforcement activities.	

Exhibit 2-12. 2004 IER Findings and Recommendations for Goal 4

#### 2.3 Summary of Progress in Addressing 2004 IER Recommendations

We assessed programmatic changes since the 2004 IER, paying particular attention to how NYTCP addressed recommendations made in the 2004 report. Overall, we found that the program has acted decisively to address these recommendations by

- expending a greater proportion of available resources to NYTCP;
- substantially improving countermarketing efforts by
  - developing a media plan and schedule,
  - placing greater emphasis on coordinating media with other programmatic efforts, and
  - airing antismoking ads with more intense imagery and stronger emotional appeals; and
- developing a new initiative to counter tobacco advertising, sponsorships, and promotions.

The program has also made a number of other changes, not specifically tied to recommendations from the 2004 IER. In January 2005, the program updated its Draft Strategic Plan. The changes involved refining its Strategic Plan to respond to expanding programmatic activities and changes in the tobacco control landscape, notably the successful implementation of the CIAA and a continued increase in tobacco advertising and promotions. In addition, the plan now has more specific and measurable programmatic objectives. The program also successfully procured a contract to distribute NRT starter kits through the Quitline. Experience from New York City suggests that this new feature of the Quitline will have a positive effect on cessation outcomes for those who receive the starter kits.

Although the program has made significant progress in addressing the recommendations from the 2004 IER, some challenges remain. For example, as part of the launch of community-based ASP initiative activities, the program had planned to develop and implement NYSDOH-created antismoking ads to complement the community-based activities; however, delays in departmental approval prevented NYTCP from achieving this coordination with statewide media. Barriers to implementing the statewide media appear to be similar to those noted in the 2004 IER. Despite this barrier, the program was able to air complementary NYTCP-approved media through its Community Partners. The program also failed to air antismoking messages for the last two quarters of 2004 because of a 6-month contract delay for the media buying contract. During this same time, there was a slowdown in Community Partner activities because of contracting delays, similar to those noted in the 2004 IER. The impact of these gaps in programmatic activities will be examined in subsequent chapters.

Finally, although the changes to the program's countermarketing efforts are quite positive, the program's media plan requires a better articulation of short-term objectives for the media efforts. In other words, what knowledge, attitudes, and beliefs does the program expect will change as a result of the planned media?

### 3. EVALUATION STUDIES AND METHODS

In RTI's first Independent Evaluation Report (IER), we described the many evaluation and surveillance systems that were in place to support a comprehensive evaluation of the New York Tobacco Control Program (NYTCP). In this chapter, we describe new evaluation activities put in place since our last report and essential details (e.g., sample size, timing) of all key evaluation studies that support this report. In addition, we provide an overview of our analytic approach to evaluation.

### 3.1 Evaluation Studies

Because NYTCP is large and complex, the data needs for evaluation are extensive and diverse. Relevant ongoing data collection activities include the following:

- Adult Tobacco Survey (ATS), administered quarterly with data available from the third quarter of 2003 (Q3 2003) to the first quarter of 2005 (Q1 2005) for the current report
- ATS 1-year longitudinal follow-up surveys: smokers and former smokers are surveyed approximately 1 year after they are initially surveyed in the ATS
- Youth Tobacco Survey (YTS) from 2000, 2002, and 2004
- Monthly tax-paid cigarette sales data for New York State and New York City
- Longitudinal evaluation survey of youth aged 13 to 16, spring/summer 2005
- Web-based Community Activity Tracking (CAT) system
- Community sentinel site study
- News media (clipping) tracking study to monitor tobacco-related news articles
- Monitoring of cigarette advertising and promotional activities in retail environments
- Employee health study
- Health care provider and provider organization surveys
- Substance abuse treatment facility surveys of tobacco use policies and treatment practices
- Quitline call volume data
- Various extant secondary data sources

In the remainder of this section, we briefly describe relevant details for the data presented in this report.

#### 3.1.1 Adult Tobacco Surveys

The ATS was initially developed by the Centers for Disease Control and Prevention (CDC) and then adapted to New York's needs by the program in partnership with RTI. The survey was first fielded on June 26, 2003, by RTI. The target population for the ATS is adults aged 18 and older living in residential households in New York. The purpose of the ATS is to monitor progress toward program goals by measuring tobacco use behaviors and attitudes and related influences on tobacco use. In addition, the survey monitors awareness and use of NYTCP activities and services. The New York ATS contains data on approximately 2,000 adults; Exhibit 3-1 summarizes sample sizes for each quarter of data collection.

	Dates of Survey	
Survey Quarter and Year	Administration	Sample Size
Q3 2003	June-September 2003	1,894
Q4 2003	October 2003–January 2004	2,063
Q1 2004	January–April 2004	1,849
Q2 2004	April–June 2004	2,346
Q3 2004	July-September 2004	2,014
Q4 2004	October-December 2004	2,059
Q1 2005	February–April 2005	1,949

Exhibit 3-1. ATS Sample Sizes per Quarter, Q3 2003 to Q1 2005

#### 3.1.2 Youth Tobacco Surveys

The New York YTS is a state-representative school-based survey of middle and high school students in grades 6 through 12. It includes questions that relate to tobacco use; access to tobacco products; knowledge, attitudes, and beliefs about tobacco; awareness of media messages aimed at promoting and curbing tobacco use; exposure to secondhand smoke; student demographics; and household environment. The YTS was conducted in 2000, 2002, and 2004. Exhibit 3-2 summarizes the sample sizes by year.

YTS Survey Year	Middle School	High School	Overall
2000	4,196	4,669	8,919
2002	4,445	3,635	8,124
2004	4,301	3,963	8,325

#### 3.1.3 Monthly Tax-Paid Cigarette Sales

Tax-paid cigarette sales data can be a timely measure of smokers' responses to policies and programs because they are available monthly and annually. Monthly data for New York can be obtained directly from New York State, whereas data from other states come from the *Tax Burden on Tobacco* series, a historical compilation of cigarette sales, taxes, and prices (Orzechowski and Walker, 2004).<sup>1</sup> However, because data on all states are not readily available in a timely manner, we contacted relevant authorities in neighboring states to obtain current data on sales trends. Currently, we have cigarette sales data for New York and all surrounding states through December 2004. We have national cigarette sales data through June 2003.

From total cigarette sales, we calculated per capita cigarette sales (in packs) by dividing state tax-paid cigarette sales by state population estimates provided by the U.S. Census Bureau. Annual cigarette sales correspond to the fiscal year ending June 30, and cigarette taxes are adjusted for inflation. Because tax-paid sales do not necessarily reflect actual consumption due to tax evasion, we made adjustments that can account for some of these factors in our analysis (details provided in Section 4.1).

#### 3.1.4 Web-Based Community Activity Tracking System

The CAT data collection system is a Web-based tool designed to facilitate program monitoring for NYTCP and to enable standardized report preparation for funded NYTCP partners. CAT, which NYTCP launched in December 2004, permits Community Partnerships, Reality Check Youth Action Partners, and Cessation Centers to systematically record their annual work plans and monthly progress reports online.

Partners' work plans consist of a wide range of individual strategies. These strategies describe the type of intervention used to influence a given programmatic goal and objective. A single strategy may involve a media campaign with television, radio, and print ads to promote smoking cessation; a tobacco retailer intervention aimed at curbing tobacco promotions; or a community event encouraging families to ban smoking in their homes and cars. The number of strategies entered into CAT provides a general idea of the types of activities that partners are conducting throughout the fiscal year and the programmatic focus of these activities.

A total of 1,920 strategies were entered into CAT for the 2004–2005 fiscal year; the 29 Community Partnerships entered 711 strategies; the 46 Reality Check Youth Action Partners entered 1,025 strategies; and the 19 Cessation Centers entered 184 strategies. Although

<sup>&</sup>lt;sup>1</sup>Through 1998, the *Tax Burden on Tobacco* was produced by the Tobacco Institute, which was disbanded by the Master Settlement Agreement (MSA), along with all other tobacco industry trade groups. The Tobacco Institute reconstituted itself as the economic consulting firm of Orzechowski and Walker in 1999 and continues to produce the *Tax Burden on Tobacco*.

the number of strategies is not a measure of the level of work planned or expended, it provides a picture of the way in which partners plan to work toward the NYTCP strategic goals. The number of strategies provides an idea of the number of different types of activities conducted for each objective, but different strategies involve different levels of planning, implementation, and follow-up. We provide a brief summary of data from CAT entries in this report to describe programmatic goal-specific activities in Chapter 4 to illustrate how partners plan to focus their activities.

#### 3.1.5 News Media Tracking

RTI, in collaboration with NYTCP staff, created a news media tracking system to monitor tobacco-related issues of interest to NYTCP that are published in the print news media. Burrelle's Luce New York Clipping Service (Burrelle) collects the news media data in accordance with an RTI-designed protocol that includes a search among all print newspapers written in English and distributed in New York and that excludes, among other things, magazines and penny savers. Burrelle identifies tobacco-related articles using the three-tiered approach from the American Stop Smoking Intervention Study (ASSIST) evaluation (Evans et al., 2003). The first tier includes tobacco key words, the second tier includes restriction/legislative terms, and the third tier includes policy-related key words. RTI coders then review articles delivered by Burrelle to verify that they meet the inclusion criteria, are consistent with the search strategy, and have at least one paragraph dealing exclusively with tobacco-related issues. RTI reviewers code each relevant article with one primary theme (e.g., secondhand smoke and related smoke-free policies), a primary topic (e.g., indoor smoking and bans), and a set of key words and then record the data in the news media tracking system.

The news media tracking data can show the extent of news media coverage of NYTCP efforts and may indicate how news media coverage is helping or hindering NYTCP objectives. In addition, the data can help answer questions concerning how the effects of news media coverage of NYTCP program components and activities translate to short-term, intermediate, and long-term program objectives. In Exhibit 3-3, we present annual and monthly data of news media tracking activity that occurred between February 2004 and January 2005; we focus on articles and advertisements with themes of "Secondhand Smoke and Smoke-free Policies" and "Education, Prevention, and Cessation Programs" and discuss news coverage of local partner activities.

From February 2004 to September 2004, we coded all articles that met the study's inclusion criteria. However, given the volume of articles to code, we investigated the possibility of coding a random sample of all identified articles. Previous research indicated that random sampling would provide comparable results and save resources. As a result, starting in October 2004, we coded a random sample of 50 percent of all identified articles.

	Articles	Advertisements	Total
February 2004	1,125	0	1,125
March 2004	1,370	0	1,370
April 2004	1,087	1	1,088
May 2004	897	135	1,032
June 2004	958	454	1412
July 2004	759	696	1455
August 2004	587	748	1335
September 2004	582	691	1273
October 2004 <sup>a</sup>	330	436	766
November 2004 <sup>a</sup>	478	450	928
December 2004 <sup>a</sup>	330	375	705
January 2005 <sup>a</sup>	221	349	570
Total	8,724	4,335	13,059

## Exhibit 3-3. Monthly Number of Coded News Media Articles, February 2004 to January 2005

<sup>a</sup>Beginning in October 2004, 50 percent of articles that met the study's inclusion criteria were coded for content themes.

#### 3.1.6 Retail Advertising Tracking Study

NYTCP Community Partnerships, Reality Check Youth Action Partners, and RTI implemented the Retail Advertising Tracking Study (RATS), a surveillance system, in the last quarter of 2004 to assess tobacco advertising and promotions in the stores of licensed tobacco vendors within the state of New York. RTI developed a protocol for measuring community and retailer characteristics, levels of store interior and exterior tobacco advertising, prevalence of ads within 3 feet of the floor or within 12 inches of candy and toys, number of store-owned functional items (such as clocks or shopping baskets), and prevalence of promotions (multipack discount, gifts with purchase, cents-off). In addition, we also measured violations of the Master Settlement Agreement (MSA) and New York Youth Access Laws: stores with exterior signage that exceeds 14 square feet, brand name merchandise free giveaways, self-service displays of tobacco products in unlocked containers located in areas accessible to the public, and compliance with the signage provisions of the Adolescent Tobacco Use Prevention Act (ATUPA).

RTI contracted with Research Diagnostics Inc. (RDI) to collect baseline data following this protocol from a representative sample of 2,250 New York retailers in November 2004. In addition, RTI trained adult members of Community Partnerships and Reality Check Youth Action Partners to collect data from tobacco vendors on a monthly basis. RTI is validating the data from stores monitored by the Community Partners by contracting with RDI to

collect data in 20 percent of the partner stores. Future reports will present data from the validation study and preliminary findings. This report presents findings from the baseline data, including frequencies of type of point-of-purchase advertising and promotions in Section 4.3.

#### 3.1.7 Health Care Provider, Provider Organization, and Substance Abuse Treatment Facility Surveys

RTI's evaluation plan calls for surveys of health care provider organizations and health care providers. The health care provider organization survey effort includes surveys of hospitals and group medical practices. These surveys provide system-level information about adherence to clinical practice guideline recommendations and tobacco cessation services offered and provide a baseline against which RTI can measure progress toward related programmatic goals and objectives. To date, RTI has completed the survey of hospitals, successfully completing 96 surveys or 82 percent of the target sample. The group medical practice survey is in progress, and a survey of health care providers recently began. The latter effort will inform adherence to clinical practice guideline recommendations and tobacco cessation services offered by providers.

A related data collection effort is the Substance Abuse Facility Surveys (SAFS), which are gathering information on the current state of treatment for tobacco dependence provided by substance abuse treatment facilities to their patients/clients and on the facilities' attitudes, beliefs, and concerns regarding tobacco control policies, especially smoke-free campuses. Our data collection plan involves sampling approximately 25 percent (N = 300) of the 1,191 substance abuse treatment facilities in the state. To obtain both an administrative and a clinical perspective, we targeted two participants from each facility: the program director and the clinical/medical director (or head nurse).

To date, 308 surveys have been completed, representing 74 percent of programs (256) and 57 percent of potential respondents. RTI will summarize data from this survey later this year.

#### 3.1.8 Quitline Call Volume Data

The New York State Smokers' Quitline (1-866-NY-QUITS) is located at Roswell Park Cancer Institute (Roswell Park) and supported through the New York State Department of Health (NYSDOH). Roswell Park monitors the type and volume of calls that the Quitline receives on a daily basis, collecting demographic and tobacco-related data from callers. We use Quitline call volume data to assess demand and possible trends in the relationships with other NYTCP programmatic efforts. One feature of the call volume data that is useful for evaluation purposes is the caller's source of referral to the Quitline. Exhibit 3-4 shows the seven sources of referrals to the Quitline, along with some examples for each.

Source	Category	
Advertising	Pack of cigarettes, television, radio, Internet, billboard, newspaper, subway, bus	
Other	311, workplace, and school/college	
Family/Friend	Family member, friend	
Clinic/Health Care Provider	Doctor, health center, and hospital	
Referrals	Roswell Park, American Cancer Society, American Lung Association, community organizations, NYTCP partners	
Fax-to-Quit	Fax-to-Quit program	
Cessation Center/Program	Cessation program in the community	

Exhibit 3-4. Quitline Data for New York State, January 2000–April 2005

#### 3.1.9 Quitline Follow-up Surveys

Roswell Park conducted annual follow-up surveys of Quitline callers from 2000 through 2003. However, no surveys were conducted in 2004. The most recent survey began in March 2005—a 3-month follow-up survey of Quitline callers. Random samples of at least 500 subjects who have called for cessation services are reinterviewed at 3 and 12 months after their initial call to the Quitline. Items assessed include process issues, such as receipt of the stop-smoking materials; methods used to quit; and smoking behavior. The main purpose of this survey is to determine how many of the smokers who contacted the Quitline within the past year have stopped smoking. The primary dependent variable is 7-day nonsmoking prevalence. This survey also collects information on methods used to stop smoking and satisfaction with the service.

#### 3.2 Evaluation Methods

Developing and implementing an evaluation of a comprehensive, multifaceted tobacco control program such as NYTCP requires understanding the program and its goals, the context in which the program operates, and the available surveillance and evaluation systems relevant to evaluating progress toward program goals. The key evaluation questions that we aim to address overall and by goal are as follows:

- Are program activities being implemented as planned?
- What are the strengths, weaknesses, and areas for improvement?
- Are limited resources being used efficiently?
- Are program outcomes changing as expected?
- Are outcomes the result of the tobacco control program or other factors?

 How are significant policy and other tobacco control events (independent of the program) influencing program-related outcomes?

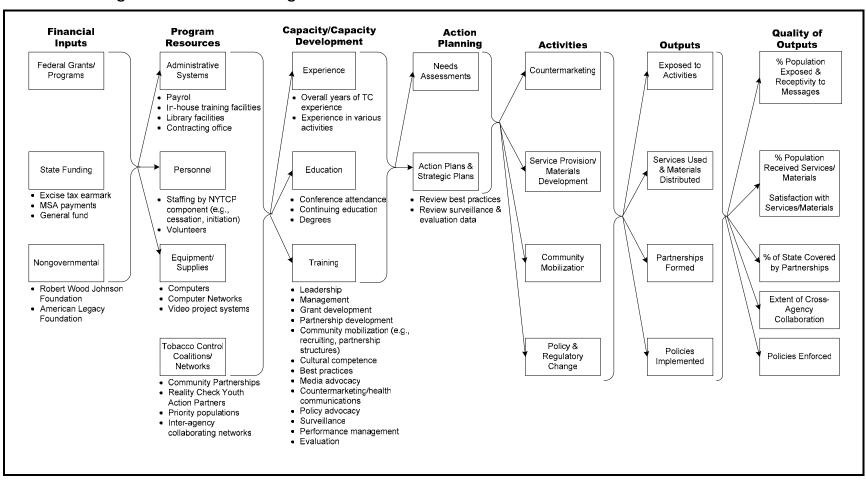
In Chapter 4, we tailor these questions to each of the program goals and address additional cross-cutting evaluation questions that are not specific to any one particular goal. In the remainder of this section, we discuss reasonable expectations for the timing of changes in program-related outcomes and briefly describe the analytic methods used in this report to address evaluation questions.

#### 3.2.1 Reasonable Expectations for the Size and Timing of Outcome Changes

To effect change, NYTCP must first transform resources into activities. Next, these activities have to reach the intended target audiences. To understand how these activities can affect behavior, we have to understand how New Yorkers react to these activities: Do they find the information salient to their decision to smoke? Are they exposed to the program messages frequently enough to influence their health behaviors? How long does this process take?

In light of the comprehensive design and varied mix of NYTCP activities and objectives, it is important to discuss how resources invested in the program are transformed into activities and how activities can effect behavior change. Exhibit 3-5 illustrates the multistep process of transforming financial resources into activities. This exhibit lists examples of the types of resources and competencies that are needed to effectively implement tobacco control interventions at the state and local levels. Recognizing the importance of enhancing the capacity of the program, NYTCP has established a goal (5) to "build and maintain an effective tobacco control infrastructure." Building capacity is a key to success because it helps ensure that resources are being used wisely and effectively. However, building capacity takes time. For example, the program recently established 19 Cessation Centers and implemented a new and innovative initiative (Advertising, Sponsorship, and Promotion [ASP]). These new efforts require significant resources by the program to ensure that they are being established consistent with their original design and purpose. To do this, the program needs to review work plans and budgets, provide technical assistance, and educate new partners about the program and its priorities. The development and implementation of the CAT system greatly facilitates our (and NYTCP's) ability to monitor how a significant portion of program resources (by way of Community Partners) is converted into activities and outputs. As we illustrate in subsequent sections of this report, the CAT system allows us to monitor partner activities as they pertain to the four primary programmatic goals.

In addition to monitoring how existing resources are being used, the nature of tobacco control also requires that the program stay informed about and respond to changing tobacco marketing practices that encourage youth smoking, discourage smoking cessation, and promote smoking as a normative behavior. The program also has to periodically review the evidence on the effectiveness of tobacco control interventions to ensure that its current practices are in line with the current data.





3-9

With this information in hand, the program must translate plans into activities and monitor the quality of the implementation of these activities. For example, are target audiences aware of the interventions and are they receptive to the messages? In the last column of Exhibit 3-5, we include measures of the quality of program outputs (e.g., appeal of media messages, quality of collaborations, customer satisfaction with program services and materials). To date, the New York ATS, Quitline customer satisfaction surveys, and the CAT system represent examples of systems that provide some measures of the quality of program outputs. For example, from the ATS, we gauge awareness of and reaction to program-sponsored media messages. Feedback from these systems allows the program to adjust activities and strategies to increase the potential impact of its efforts.

Finally, it is important to measure whether interventions are reaching a significant enough proportion of the target audience to have an impact. Understanding the timing between activities and impact is challenging, however, because the current evidence base does not necessarily provide adequate information about how and when activities will have their intended impact. It is important to note that, even under ideal circumstances, various program interventions will require varying amounts of time to have their desired impact. For example, one would expect that a media campaign has a short-term impact on awareness (within months of implementation) and subsequently influences knowledge, attitudes, and beliefs (within 6 to 12 months) and then behavior (1 to 3 years) (Exhibit 3-6). However, in the case of advocating for policy change, it is more difficult to monitor progress and predict when change will occur. Efforts to promote smoke-free environments in New York began in the early 1990s, and although change did occur incrementally over time, it took more than a decade before there was sufficient support for a comprehensive law such as the current CIAA.

Further complicating our ability to assess the timing of changes in outcomes are the synergies inherent in a comprehensive program design. In other words, we cannot easily trace the specific chain of events that may exist from specific program activities to increases in awareness and decreases in tobacco use to assess effectiveness; therefore, we need to employ additional methods to attribute changes in long-term outcomes, such as increased successful quit rates, to the program.

To accomplish this, we first examine trends to assess whether they are changing in the expected direction. We then compare these trends with reasonable comparison groups, when available. For example, comparing New York with the country as a whole indicates whether trends in New York outcomes reflect average state experiences. However, because comparison data are not available for many of the relevant measures, we have to make informed judgments about the size and timing of changes in program outcomes.

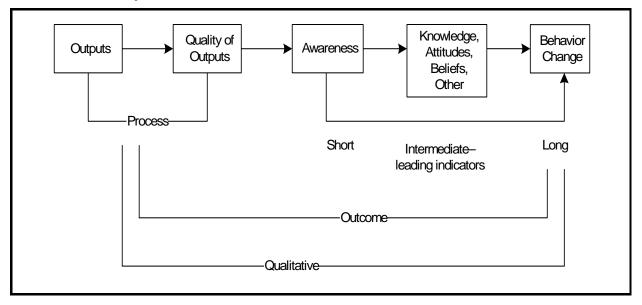


Exhibit 3-6. Simple Evaluation Framework

#### 3.2.2 Evaluation Methods

Following the logic of Exhibit 3-6, our approach to evaluating progress involves assessing program resources and how they have been translated into activities overall and consistent with each of the four primary programmatic goals. Building on this understanding, we then analyze available surveillance data on behavioral determinants (e.g., awareness, attitudes, intentions) and behavioral outcomes (e.g., initiation, cessation). A number of analytic descriptive and multivariate strategies are available to assess program impact on intermediate and long-term outcomes. These methods are consistent with those described in the 2004 IER.

#### Descriptive Techniques:

- Examine trends in self-reported exposure to program activities (e.g., awareness of antitobacco advertisements).
- Examine trends in self-reported outcomes by level of self-reported program exposure (e.g., exposed/not exposed or dose of exposure).
- Examine trends in self-reported program exposure and outcomes by level of program exposure based on external measures.
  - Media market measures of the dose of antitobacco advertisements
  - Number/intensity of Community Partner activities
  - Regional per capita volume of Quitline calls
  - Regional variation in news media coverage of tobacco issues

- Interrupted time-series analysis of changes in program outcomes as policies are changed or new interventions are implemented. For example, pre-post analyses of
  - the effects of the July 24 implementation of the comprehensive CIAA on secondhand exposure,
  - tax-paid sales data in New York State and City after implementation of the excise tax increases, and
  - self-reported cessation behavior once regional Cessation Centers are established and promoted.
- Analyze trends in intermediate and long-term outcomes over time (e.g., quarterly data from the ATS) and contrast with any relevant and available comparison data from other states.

#### Multivariate Methods:

 Relate self-reported exposure to program activities to self-reported program outcomes in cross-sectional surveys at a point in time and with time-series data, controlling for confounding factors.

The first three descriptive analyses help us understand the basic trends in these important measures. To attribute changes in program outcomes to the program, it is necessary to first document changes in the expected direction for exposure to program activities and targeted outcomes. The other descriptive and multivariate models attempt to correlate exposure to program activities to program outcomes. The heart of these quantitative strategies focuses on the notion that individuals will differ in their exposure to various program activities (e.g., media campaign, Community Partners). By relating these exposures to outcomes, we will better understand how program initiatives work independently and jointly to contribute to the attainment of program goals. For example, adults who work in a smoke-free environment, live in a community with active Community Partners and readily available support for cessation, and are frequently exposed to antitobacco media messages will be less likely to smoke than comparable adults who receive a smaller "dose" of these interventions. This strategy points to the critical importance of having good measures of exposure and awareness of program activities. A similar approach has been used in California (Rohrbach et al., 2002).

By using the mix of program activities across schools, workplaces, communities, and media markets, we can better measure the impact of each program component on key outcomes to determine program successes and failures. In assessing program effectiveness, our evaluation must also attend to the possibility that the context in which these program activities occur will influence program outcomes. Sociodemographic characteristics and the communities' capacity to organize and deliver tobacco control interventions may influence program effectiveness.

We attempt to draw conclusions about program impact using trend analyses, including prepost analyses, and multivariate analyses, which relate self-reported outcomes to selfreported exposures. We describe these approaches in the following subsections.

#### Trend Analysis

First, to evaluate the effectiveness of the overall program, aggregate time-series models (trend analysis) can be used to observe if NYTCP implementation has had an effect on the observed trend in a particular aggregate outcome (e.g., smoking rates, tax-paid sales). This type of analysis could be used to examine outcomes specific to a particular program goal (e.g., smoking cessation) and separate program activities individually (e.g., Community Partner efforts, media campaign). However, with such a model, attributing an observed change in trend to any particular program activity is difficult.

This is essentially a type of pre-post model that examines the trend in a specific outcome before and after implementation of the NYTCP. This method implicitly controls for state-level unobserved factors that are time invariant. However, because other unobserved factors, other than implementation of the NYTCP, could have an impact on outcomes, this method provides only weak statements about the program's effectiveness. The strength of causal claims of NYTCP's effectiveness can be enhanced for these types of models (aggregate timeseries) by comparing the trend in New York to similar states that have few or no tobacco control program activities.

#### Multivariate Analysis—Cross-Sectional Data

Second, when sufficient data exist for measuring program exposure and/or awareness and for important outcomes and controls, then more advanced multivariate time-series models can be specified that attempt to attribute observed trends in outcomes to trends in program activities, controlling for possible confounders. This type of model requires repeated cross-sectional surveys (the same variables measured consistently over time). If the same aggregate unit is measured over time (e.g., community, county, school, or school district), then unobserved time-invariant factors associated with that aggregate unit can be controlled for in the analyses. This model allows for stronger causal statements about the effectiveness of the NYTCP.

A single cross-section of data can be used for a correlational analysis. This type of model is best for exploring associations between variables but does not allow causal statements about program effectiveness (except in cases when a strong theory is guiding the analysis, and even then a cautious interpretation of any causal claims is warranted). Multilevel models and/or structural equation models can be specified and estimated using cross-sectional data.

Much of the data available for evaluating the NYTCP come from several repeated crosssectional surveys like the ATS. Thus, any of the models discussed above can be employed to examine the effectiveness of the NYTCP. However, all of the above models have deficiencies in making causal claims about program effectiveness, especially when the outcomes of interest are at the individual level. To make the strongest causal claims about the impact of NYTCP on individual outcomes (given a nonexperimental design), longitudinal data on individuals are required.

Quantitative methods, while providing evidence of the program's effectiveness, have limitations in explaining the observed effectiveness. Results of the quantitative methods do not always provide answers that are useful to those implementing and conducting NYTCP activities. To add a richer level of detail and suggest possible explanations for the observed quantitative results, we suggest complementary qualitative methods. The aim of these efforts is to better understand the context within which change may be occurring and the "how" and "why" of program implementation. Currently, we are relying on process data from the CAT system and plan additional qualitative methods to complement CAT.

### 4. EVALUATION FINDINGS

In this chapter, we present two distinct types of evaluation findings: (1) cross-cutting findings and (2) findings pertaining to each of the four programmatic goals. Cross-cutting findings pertain to cross-cutting outcomes and influences that are not specific to any one or are affected by many of the four primary programmatic goals, such as the prevalence of smoking among adults and the number of tax-paid cigarette sales as a related program outcome. The remaining findings pertain to each of the four programmatic goals, relying heavily on measures in the Adult Tobacco Survey (ATS) and the Youth Tobacco Survey (YTS) to assess progress toward stated goals. Many of the measures in the ATS provide indicators that are more proximal to the activities implemented by the program and hence should be more sensitive measures of change or progress. Although it is difficult say with certainty how much change constitutes reasonable progress, we make informed assessments by comparing the range and intensity of programmatic efforts to changes in related indicators of progress. In addition to the analyses presented below, we present two sets of tables that complement the exhibits presented in this chapter. One set provides annual comparisons of the ATS (2003–2004) and YTS (2000–2004) statistics presented in this chapter (Appendix A), and the other set provides analyses by demographic characteristics for the 2004 ATS and 2004 YTS (Appendix B). Statistically significant differences by year or by demographic characteristics in these tables are indicated with an asterisk. Both sets of tables are numbered to correspond with the exhibit numbers in this chapter (with the prefix "AC" for the annual comparisons and the prefix "DT" for the detailed tables by demographic characteristics).

### 4.1 Cross-Cutting Evaluation Findings

For many of the programmatic objectives, there is a relatively clear link between the objective; the corresponding program activities; and the short- and intermediate-term outcomes that the activities are intended to influence. In fact, the comprehensive design of the New York Tobacco Control Program (NYTCP) assumes that many programmatic activities can have far-reaching effects that cut across specific programmatic goals and objectives and work together to effect change. In addition, it is important to assess the impact of legislative changes and factors independent of the program or even outside the state that may affect tobacco-related outcomes. In this section, we examine how the cumulative effect of all programmatic activities and other factors may influence trends in the prevalence and intensity of tobacco use in New York.

Specifically, we address a number of evaluation questions that help us understand both the progress that NYTCP is making and the influence of relevant policy changes in the state:

1. Are trends in the prevalence of smoking among adults and youth in New York declining faster than in the United States as a whole?

- 2. Is monthly cigarette consumption among adult smokers declining over time?
- 3. Are trends in the prevalence of other tobacco product use declining among adults and youth?
- 4. Are trends in tax-paid cigarette sales declining faster in New York than in the United States as a whole?
- 5. Is tax evasion eroding the effects of cigarette excise tax increases in New York?

# 4.1.1 Are Trends in the Prevalence of Smoking Among Adults and Youth in New York Declining Faster than in the United States?

As we noted in the 2004 Independent Evaluation Report (IER), investments in tobacco control have been shown to reduce the prevalence of youth and adult smoking, but there is a lag between the appropriation of funding; implementation of program activities; and resultant changes in tobacco-related attitudes, knowledge, and behavior. This lag exists because tobacco use is an addictive behavior and changing behavior takes time and because building the necessary program infrastructure (e.g., talented, trained staff; strategic plans) takes time. By comparing trends in New York with trends in the United States as a whole, we can assess whether trends compare favorably to the average experience in the country 5 years after the program began (in 2000). We noted that New York's investments in tobacco control were approximately on par with average expenditures in the United States. Comparing trends in New York to the country provides indirect evidence of whether New York's tobacco control efforts are having an effect above the average.

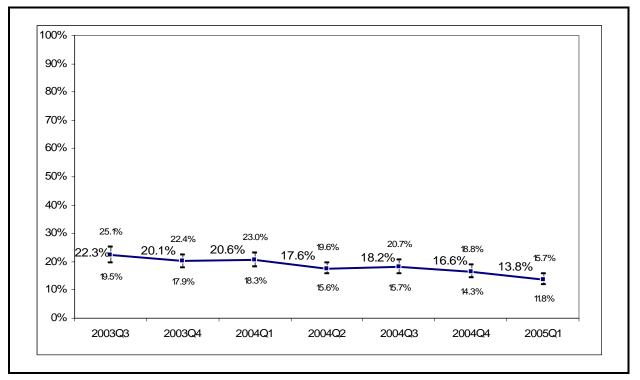
#### Trends in Adult Smoking

Drawing on annual National Health Interview Surveys (NHIS), New York State's Behavioral Risk Factor Surveillance System (BRFSS), and the New York ATS, we are able to compare trends in smoking among adults between New York and the country as a whole. Exhibit 4-1 shows that from 2001 to 2003, trends in the percentage of adult current smokers in New York tracked trends in the United States as a whole very closely. There were no statistically significant differences across the three surveys in 2003. In contrast, the percentage of adults who smoke declined faster in New York than in the United States as a whole from 2003 to 2004, according to the ATS (p < 0.009). This decline in the percentage of New Yorkers who smoke, from 20.8 to 18.1 percent, represents a 13 percent relative decline and 300,000 fewer smokers. To provide more detail on the trends in adult smoking in New York, we present ATS data from the third quarter of 2003 (Q3 2003) to the first quarter of 2005 (Q1 2005) in Exhibit 4-2. This exhibit shows that the percentage of adults who are current smokers declined from 22.3 percent in Q3 2003 to 13.8 percent in Q1 2005, a relative decline of 38 percent (p < 0.001).

Year	NHIS	New York BRFSS	New York ATS
2001	22.7 [22.1–23.3]	23.2 [21.6-24.8]	-
2002	22.4 [21.7-23.0]	22.3 [20.8-23.8]	-
2003	21.6 [21.0-22.2]	21.6 [20.3-22.9]	20.8 [19.0-22.5]
2004	20.9 [20.3-21.5]	19.9 [18.7–21.1]	18.1 [16.9-19.2]

## Exhibit 4-1. Percentage of Adults Who Smoke Nationally and in New York, 2001–2004 [95 Percent Confidence Intervals]

## Exhibit 4-2. Percentage of Adults Who Currently Smoke Every Day or Some Days, ATS Q3 2003–Q1 2005



These comparisons provide indirect evidence that the programmatic and policy changes in New York are having an effect. With the available data, we are not currently able to tease out the effect above the United States as a whole of the NYTCP versus the effects of taxes and other policy changes, such as the Clean Indoor Air Act (CIAA), on the prevalence of smoking through 2004. Although there were no new cigarette excise taxes in 2003 or 2004, studies of the impact of cigarette excise taxes on smoking indicate that there are both short-run (less than 1 year) and long-run effects (more than 1 year). However, these studies have not examined the effect of relatively large cigarette excise taxes like those in New York City and State. As more data become available, we will pursue analyses that permit us to estimate the effect of the program separate from other policy changes.

#### Trends in Youth Smoking

To examine whether the percentage of middle and high school students in New York who smoke has changed over time, we present data from the 2000, 2002, and 2004 YTS. We compare these data with data for the United States as a whole by presenting data from the 2000, 2002, and 2004 National Youth Tobacco Surveys (NYTS) as reported in the *Morbidity and Mortality Weekly Reports*.<sup>1</sup> Using data from the YTS, we define current smoking behavior as any cigarette use in the 30 days preceding the school survey.

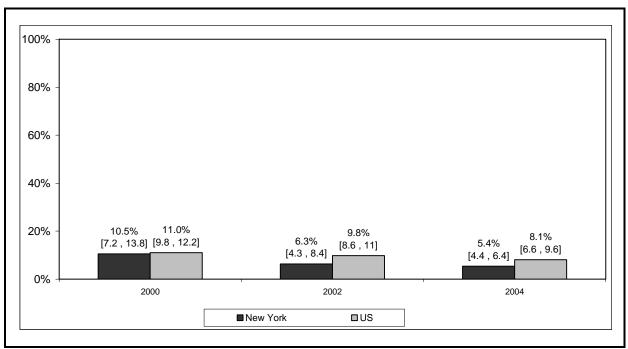
Exhibits 4-3 and 4-4 present trends in youth smoking from 2000 to 2004 for youth in New York and in the United States. These data show that the percentage of youth who currently smoke declined significantly between 2000 and 2004 among both middle school and high school students in New York and the United States. Among middle school students in New York, current smoking declined from 10.5 percent in 2000 to 5.4 percent in 2004 (p < 0.001), a relative decline of 49 percent. Although the percentage of youth who smoke in New York was similar to the percentage in the United States in 2000, it was lower than the national average in 2004, indicating that the percentage of middle school students who smoke in New York declined faster than in the United States as a whole. The percentage of high school students in New York who smoke declined from 27.1 percent to 18.5 percent from 2000 to 2004 (p < 0.003), a relative decline of 32 percent. The declines among high school students in New York were similar to those in the United States as a whole.

Similar to the declines in adult smoking in New York that outpaced declines in the United States as a whole, the declines in smoking among middle school students in New York provide indirect evidence that the programmatic and policy changes in New York from 2000 to 2004 are having their intended effects.

#### 4.1.2 Is Monthly Cigarette Consumption Among Adult Smokers Declining Over Time?

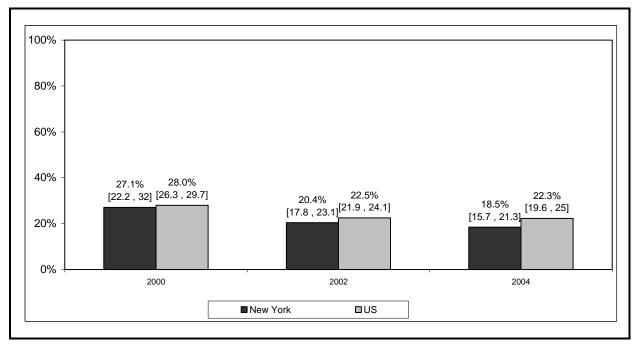
To assess whether cigarette consumption among smokers is changing over time, we created a measure of monthly cigarette consumption from the ATS. The ATS asks every-day smokers "On average, in the past 30 days, about how many cigarettes a day do you now smoke?" and some-day smokers, "On the average, on the days when you smoked during the past 30 days, about how many cigarettes did you smoke a day?" Some-day smokers are also asked "During the past 30 days, on how many days did you smoke cigarettes?" Based on responses to these questions, we calculated the number of packs smoked per month

<sup>&</sup>lt;sup>1</sup>We do not currently have access to state identifiers for the NYTS 2004 data, so we cannot examine trends for New York versus the remaining United States. Therefore, our analyses compare New York to the United States as a whole, including New York.

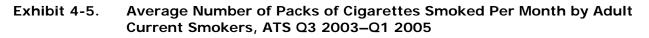


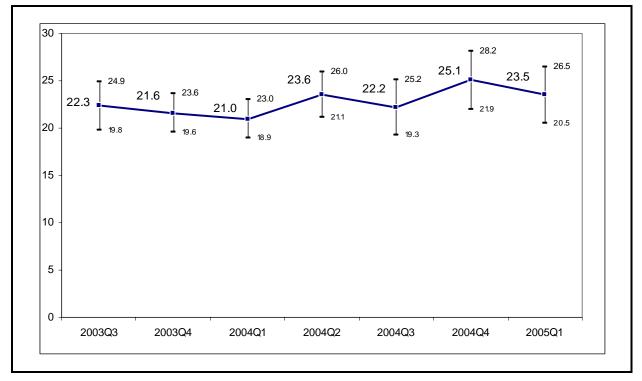
## Exhibit 4-3. Percentage of Middle School Students Who Currently Smoke, YTS 2000–2004 and NYTS

Exhibit 4-4. Percentage of High School Students Who Currently Smoke, YTS 2000–2004 and NYTS



among smokers by multiplying daily cigarette consumption by the number of days smoked in the past 30 days. Exhibit 4-5 shows that monthly cigarette consumption among current smokers has remained stable over time at approximately 23 packs.





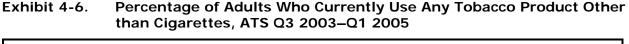
#### 4.1.3 Are Trends in the Prevalence of Other Tobacco Product Use Declining Among Adults and Youth?

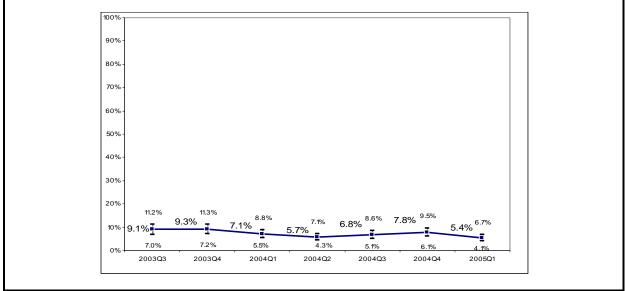
#### Trends in Adults' Use of Other Tobacco Products

In addition to being asked to report their current smoking status, ATS respondents are asked the following questions about their use of other tobacco products:

- Please tell me whether or not you now use any of the following tobacco products:
  - Chewing tobacco, snuff, or dip (smokeless tobacco)
  - Cigars, cigarillos, or little cigars
  - Pipe tobacco
  - Flavored cigarettes from India called bidis
  - Clove cigarettes or kreteks

For each positive response, respondents are then asked if they now use the product every day or some days. Based on these questions, we calculated the percentage of respondents who currently use any of these products every day or some days (Exhibit 4-6). This percentage declined from 9.1 percent in Q3 2003 to 5.4 percent in Q1 2005. The percentage of adults who currently smoke cigars constitutes the majority of other tobacco product use.



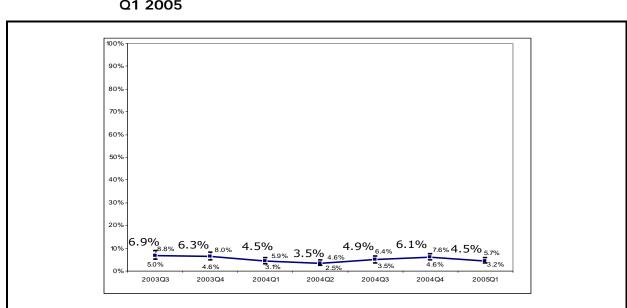


The percentage of adults who use smokeless tobacco, pipes, bidis, and clove cigarettes is less than 1 percent in Q1 2005 and does not exceed 2 percent in any quarter from Q3 2003 to Q1 2005 (data not shown). The percentage of adults who smoke cigars ranges from 3.5 to 6.9 percent across all quarters and shows no statistically significant trend (Exhibit 4-7).

## Trends in Youth's Use of Other Tobacco Products

We present trends in the percentage of middle and high school students who use tobacco products other than cigarettes using data from the 2000, 2002, and 2004 YTS. The YTS asks youth if they have used each of the following tobacco products in the past 30 days:

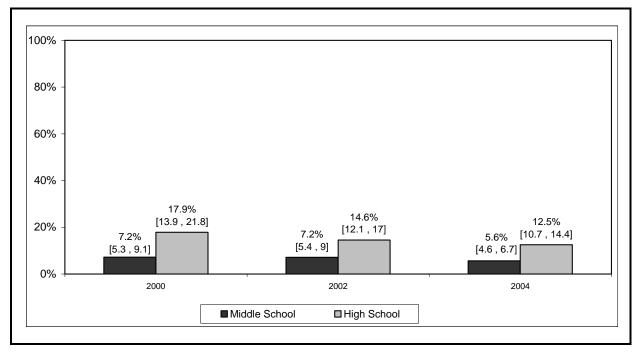
- Smokeless tobacco
- Cigars
- Pipes
- Bidis
- Clove cigarettes (kreteks)



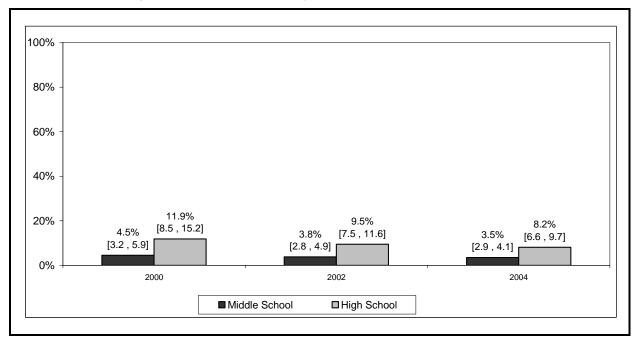
### Exhibit 4-7. Percentage of Adults Who Currently Smoke Cigars, ATS Q3 2003– Q1 2005

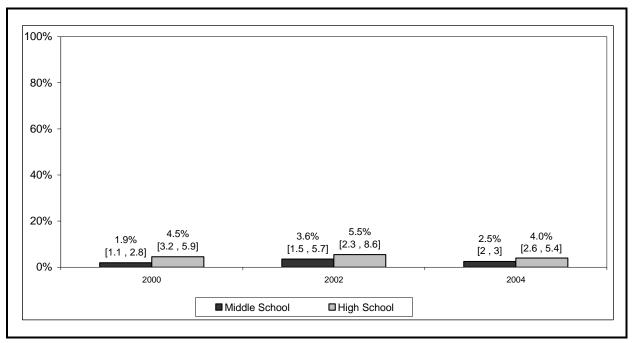
Based on responses to these questions, we created an indicator for the percentage of youth who have used any of these products in the past 30 days. This indicator (presented in Exhibit 4-8) shows that the percentage of other tobacco product use has declined among middle school students from 7.2 to 5.6 percent (p < 0.02) and among high school students from 17.9 to 12.5 percent (p < 0.02). These declines translate to a relative decline of 22 and 30 percent in other tobacco product use among middle school and high school students, respectively. The relative percentage decline in other tobacco product use from 2000 to 2004 among high school students (31 percent) is comparable to the decline in cigarette use in this group (33 percent) but smaller than the decline for middle school students (54 percent). The decline in other tobacco product use among high school students is largely due to a statistically significant decline in cigar use among high school students (Exhibit 4-9), from 11.9 in 2000 to 8.2 percent in 2004 (p < 0.04), a relative decline of 32 percent. The use of other smokeless tobacco did not change over time among middle or high school students (Exhibit 4-10). There were no changes in the use of other less commonly used tobacco products, such as pipe tobacco, clove cigarettes (kreteks), or bidis. Although it is not clear whether the declines in the use of tobacco products other than cigarettes compare favorably with changes in the United States as a whole, they do represent large and meaningful declines of a similar magnitude to changes in current smoking.

### Exhibit 4-8. Percentage of Middle and High School Students Who Have Used Tobacco Products Other Than Cigarettes in the Past 30 Days, YTS 2000–2004



## Exhibit 4-9. Percentage of Middle and High School Students Who Have Smoked Cigars in the Past 30 Days, YTS 2000–2004





### Exhibit 4-10. Percentage of Middle and High School Students Who Have Used Smokeless Tobacco in the Past 30 Days, YTS 2000–2004

### 4.1.4 Are Trends in Tax-Paid Cigarette Sales Declining Faster in New York than in the United States as a Whole?

In addition to investments in tobacco control, increases in the price of cigarettes have been shown to reduce the prevalence and intensity of cigarette smoking. In light of the increases in cigarette excise taxes in New York State and City in recent years, we would expect that cigarette consumption and the prevalence of smoking would decline in response to these changes. However, New York is somewhat unique in that it has a number of American Indian reservations that sell tax-free cigarettes. The availability of low-price cigarettes through this and other low-price venues (e.g., the Internet) may erode the effects of cigarette excise taxes. We present data that address the extent to which this appears to be an important phenomenon in New York State.

We begin by presenting the trend in per capita (per adult 18+) tax-paid cigarette sales for New York from 1999 to 2004 (Exhibit 4-11). This trend indicates a decline in sales, with a noticeable drop in sales when the tax was increased statewide from \$0.56 to \$1.11. To put this trend in perspective, we compare it to sales in the country as a whole. For both the New York and U.S. trends (available only through June 2003), we add a quadratic trend line to facilitate comparisons (Exhibit 4-12). This shows that tax-paid sales are declining at a faster rate in New York than in the United States. However, because we recognize (and demonstrate below) that tax-paid sales do not reflect true consumption, we conduct an

Exhibit 4-11. Trends in Per Capita (Per Adult 18+) Monthly Tax-Paid Cigarette Sales, New York State, 1999–2004

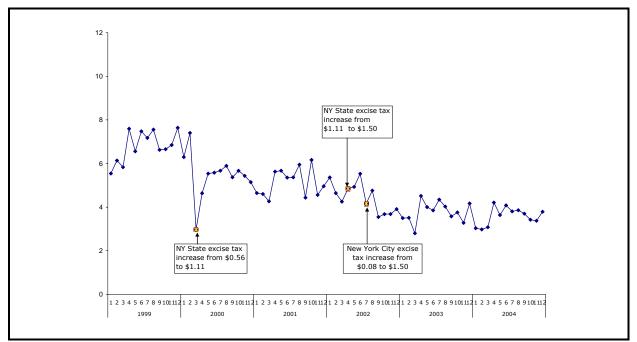
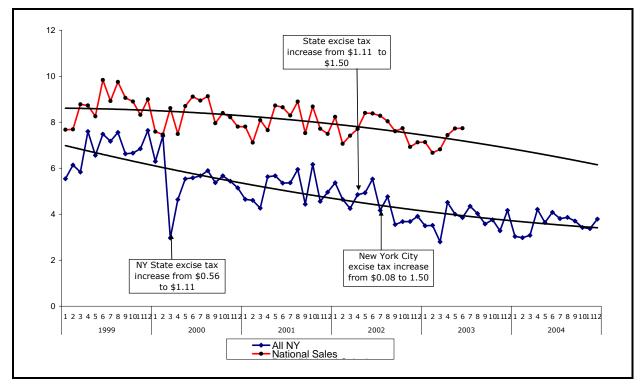


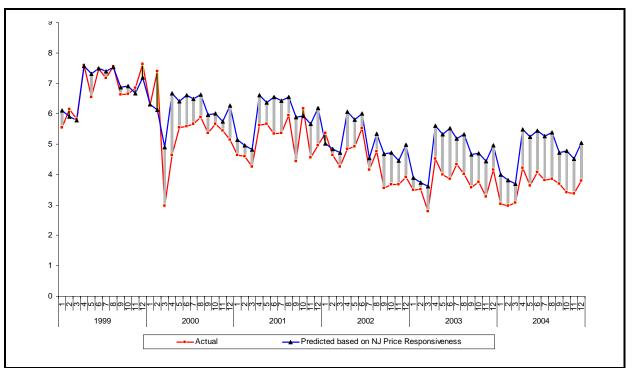
Exhibit 4-12. Trends in Per Capita (Per Adult 18+) Monthly Tax-Paid Cigarette Sales, New York and United States, 1999–2004



analysis that attempts to correct for two forms of tax evasion—purchasing in neighboring states and on American Indian reservations.

First, to adjust for the influence of New York smokers purchasing cigarettes in neighboring states, we estimate how relatively low cigarette excise taxes in neighboring states influence cigarette sales in New York. We then predict what sales would be if taxes were similar in all surrounding states. Second, to indirectly adjust for the influence of American Indian reservations on sales, we estimate how cigarette sales in New Jersey responded to large tax increases similar to those that occurred in New York. New Jersey is a helpful comparison because it does not have any federally recognized American Indian tribes. We then apply to New York estimates of how cigarette sales in New York to predicted sales using the price response in New Jersey and controlling for the influence of purchases out of state. Exhibit 4-13 shows that, before the cigarette tax increases in New York, actual sales and the predicted sales from our model are closely matched. Afterwards, there are differences between the actual and predicted sales. This difference is the estimated amount of tax evasion due to cigarette purchases from American Indian retailers on reservations.

Exhibit 4-13. Actual and Predicted Cigarette Sales in New York, Adjusting for Tax Evasion, 1999–2004



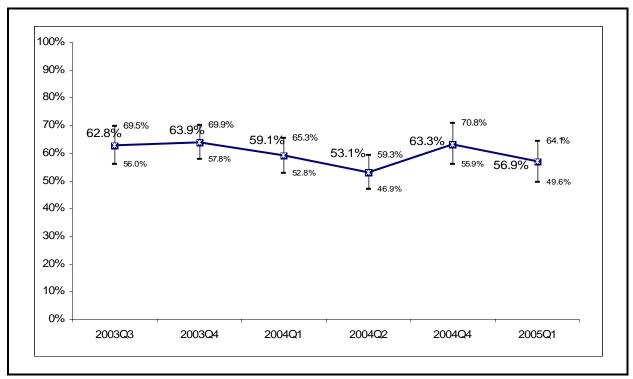
From 1999 to 2004, actual tax-paid sales declined 47 percent in New York (81.6 to 43.0 packs per capita (per adult 18+)), while predicted sales dropped by 31 percent (82.8 to 57.4 packs per capita). Based on these results, cigarette sales would have been 33 percent higher in 2004 in the absence of tax evasion from American Indian reservations. This translates to 79.5 packs per smoker per year or a "corrected" per capita consumption of 57.4 (instead of 43.0). To further understand the extent to which these declines in sales represent declines in smokers' consumption of cigarettes versus attempts to avoid the tax through purchases in neighboring states, the Internet, American Indian reservations, and other sources, we discuss the prevalence of these behaviors below.

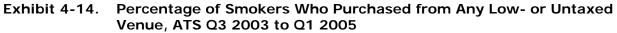
## 4.1.5 Is Tax Evasion Eroding the Effects of Cigarette Excise Tax Increases in New York?

To assess the prevalence of tax evasion in New York, we use data from the ATS. The ATS asks smokers to report whether they purchased cigarettes from several low- or untaxed sources in the past 12 months. Those who respond affirmatively are then asked how often they purchased from these sources: "always," "sometimes," or "rarely." The ATS includes separate questions for the various locations where smokers can purchase cigarettes tax free or at reduced tax levels: on American Indian reservations, in another state/country, from the Internet, from a toll-free number, and at duty-free shops. We begin by displaying the percentage of smokers who report purchasing from any one of these five locations in the past 12 months (Exhibit 4-14). This exhibit shows that the majority of smokers in New York have purchased cigarettes from a low- or untaxed source at least once in the past year. Exhibit 4-15 presents the percentage of smokers who purchased at each of the five locations in the past 12 months and indicates that American Indian reservations and out of the state or country are the most common locations, followed by duty-free shops, the Internet, and toll-free numbers.

Exhibits 4-14 and 4-15 demonstrate that purchasing cigarettes at low- or untaxed locations is very common, but they do not indicate how frequently smokers purchase in these locations. In Exhibit 4-16, we present the trend in the percentage of smokers who reported purchasing "always" or "sometimes" from any of these five sources (in Q3 2004, the frequency of purchasing was not asked in the ATS). This exhibit shows that between 34 and 42 percent of smokers reported purchasing cigarettes always or sometimes from at least one of these venues in the past 12 months. Although this is a considerable percentage of smokers, it is significantly less than the percentage who have purchased at least once in the past 12 months.

Because there have been no increases in New York's cigarette excise taxes during this time frame and few large increases in neighboring states' tax rates, one might expect the observed stable trend in tax evasion. Exhibit 4-17 shows the percentage of smokers who purchased cigarettes "all the time" or "sometimes" from each of these five sources in the





### Exhibit 4-15. Percentage of Smokers Who Purchased At Least Once from Various Low- and Untaxed Venues in the Past 12 Months, ATS Q3 2003 to Q1 2005

	2003Q3	2003Q4	2004Q1	2004Q2	2004Q4	2005Q1
American Indian reservation	29.9% [24.4–35.4]	34.8% [29.5–40.1]	28.0% [22.9–33.2]	32.7% [27.3–38.1]	37.8% [31.0-44.6]	27.1% [21.1-33.2]
Out of state	38.4%	36.6%	35.1%	26.9%	34.5%	30.9%
or country	[31.4–45.3]	[30.8-42.3]	[29.1-41.0]	[21.6-32.2]	[27.6-41.5]	[24.1-37.7]
Internet	9.0%	11.0%	9.3%	8.6%	8.9%	3.8%
	[5.4–12.6]	[7.4–14.5]	[6.0–12.6]	[5.5–11.7]	[5.2–12.6]	[1.6-6.0]
Toll-free	5.7%	6.4%	6.3%	4.8%	7.1%	5.5%
number	[2.6-8.8]	[3.7–9.1]	[3.3–9.2]	[2.8-6.8]	[3.5–10.7]	[1.5-9.4]
Duty-free	16.8%	12.9%	15.2%	14.0%	14.3%	16.9%
shop	[11.6-22.1]	[8.9–16.9]	[10.7–19.6]	[10.0-18.0]	[9.4–19.2]	[11.4-22.5]

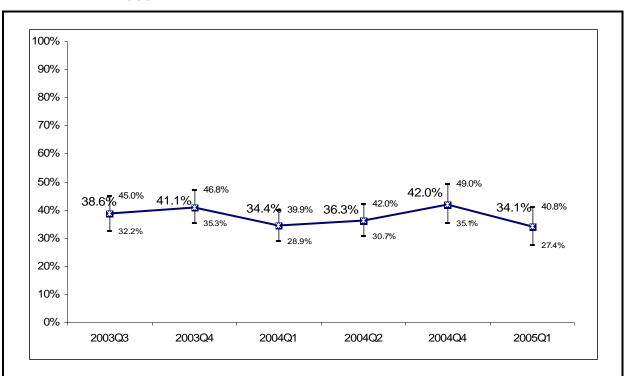


Exhibit 4-16. Percentage of Smokers Who Purchased "All the Time" or "Sometimes" from Any Low- or Untaxed Venue, ATS Q3 2003 to Q1 2005

Exhibit 4-17.	Percentage of Smokers Who Purchased "All the Time" or
	"Sometimes" from Various Low- and Untaxed Venues in the Past 12
	Months, ATS Q3 2003 to Q1 2005

	Q3 2003	Q4 2003	Q1 2004	Q2 2004	Q4 2004	Q1 2005
American Indian reservation	22.4% [17.7–27.1]	26.8% [21.8-31.7]	19.7% [15.3–24.2]	26.1% [21.1-31.0]	29.0% [23.1–34.9]	21.9% [16.3–27.6]
Out of state	14.4%	16.0%	14.0%	10.9%	12.4%	11.7%
or country	[9.6–19.2]	[11.9–20.1]	[10.0-17.9]	[7.3–14.4]	[8.0–16.7]	[7.2–16.2]
Internet	6.1%	6.4%	3.7%	5.7%	8.1%	2.6%
	[3.2–9.0]	[3.7–9.2]	[2.1–5.2]	[3.2–8.2]	[4.5–11.7]	[0.6-4.5]
Toll-free	4.4%	5.0%	3.7%	3.1%	5.4%	5.3%
number	[1.6-7.3]	[2.7–7.4]	[2.0-5.5]	[1.5-4.8]	[2.5-8.2]	[1.3–9.2]
Duty-free	8.2%	4.5%	5.8%	6.2%	6.6%	4.8%
shop	[4.4-12.0]	[2.0-7.1]	[3.3–8.3]	[3.6–8.7]	[3.4–9.8]	[2.3-7.4]

past 12 months. This table shows that smokers most frequently purchase from American Indian reservations (approximately 25 percent of smokers), followed by out of state/country (11 to 16 percent of smokers).

Tax evasion can have a number of implications: (1) smokers who evade the tax may be less likely to engage in smoking cessation, (2) tax evasion can erode the effects of higher cigarette prices on youth smoking prevalence (these latter two issues are addressed in the sections of this report on smoking cessation [Section 4.4] and smoking initiation [Section 4.5]), and (3) the state loses revenue.

To examine the first issue, we summarize self-reported price paid per pack of cigarettes from the ATS for smokers who report frequently purchasing from low- and untaxed sources versus those who do not. The reported price paid is based on the smoker's last purchase. Exhibit 4-18 shows that smokers who report purchasing cigarettes frequently from low- and untaxed sources pay \$1.59 (31 percent) less per pack than those who do not. This exhibit also shows the prices for New York City and elsewhere in the state. The average price per pack is \$1.68 higher in New York City compared to elsewhere, consistent with the difference in tax between these two areas: \$3.00 versus \$1.50.

	Average Overall Price	Average Price— New York City	Average Price— Remainder of the State
Overall	\$4.52 [4.43–4.61]	\$5.62 [5.44–5.80]	\$3.95 [3.86–4.03]
Smokers' Who Rarely or Never Report Purchasing from Low- and Untaxed Sources	\$5.11 [5.00–5.21]	\$6.04 [5.85–6.23]	\$4.49 [4.40-4.57]
Smokers' Who Frequently Report Purchasing from Low- and Untaxed Sources	\$3.52 [3.36–3.67]	\$4.51 [4.07-4.94]	\$3.21 [3.05–3.36]

Exhibit 4-18.	Average Price Per Pack of Cigarettes by Smokers' Self-Reported
	Frequency of Tax Evasion

Because higher prices have been consistently shown to reduce both the prevalence of smoking and cigarette consumption, tax evasion is eroding the effects of higher prices on smoking behaviors. If all smokers were prevented from avoiding the tax and forced to pay the price reported by those who rarely or never avoid the tax, the average reported price of cigarettes statewide would increase by \$0.58 per pack on average, a 13 percent increase in price. This would lead to a 2 to 3 percent decrease in the prevalence of smoking (from 18.1 percent to 17.6–17.7 percent). In addition, daily consumption of cigarettes would also

decline by 2 to 3 percent.<sup>2</sup> Exhibit 4-19 provides additional information on how average cigarette prices vary based on the source of cigarettes and the frequency of purchasing from these sources.

### 4.1.6 Summary, Conclusions, and Recommendations

In this section, we reported trends in tobacco use as cross-cutting measures of the program's progress. Where possible, we compared trends in New York with national trends to assess whether tobacco use is declining faster in New York than in the average state. As noted in the 2004 IER, spending on tobacco control in New York was at the average across all states. We find that the percentage of adults and youth who smoke cigarettes declined faster in New York than in the United States as a whole. In addition, the use of tobacco products other than cigarettes also declined among adults and youth. Finally, we quantified the extent of cigarette excise tax evasion. In summary, we found the following:

- From 2003 to 2004, the percentage of adults who smoke declined from 20.8 to 18.1 in New York, a relative decline of 13 percent and a reduction in the number of smokers by 300,000. This compares favorably to declines in the United States from 21.6 percent in 2003 to 20.8 percent in 2004, a 3 percent relative decline.
- From 2000 to 2004, the percentage of middle school students who smoke declined from 10.5 to 5.4 percent, and the percentage of high school students who smoke declined from 27.1 to 18.5 percent.
  - The decline in smoking among middle school students in New York was greater than declines in the United States as a whole from 2000 to 2004; declines among high school students were comparable to national declines.
- The use of tobacco products other than cigarettes declined among adults (from 9.1 percent in Q3 2003 to 5.4 percent in Q1 2005), middle school students (from 7.2 percent in 2000 to 5.6 percent in 2004), and high school students (from 17.9 percent in 2000 to 12.5 percent in 2004). The decline in other tobacco product use among high school students is driven primarily by declines in the use of cigars from 11.9 to 8.2 percent.
- Self-reported monthly cigarette consumption among smokers was stable from Q3 2003 to Q1 2005, at 23 packs per month.
- Tax-paid sales declined 47 percent in New York from 1999 to 2004. However, correcting for estimated purchases from tobacco retailers on American Indian reservations, the estimated decline was 31 percent.
  - These results suggest that cigarette sales in New York were 33 percent higher in 2004 when accounting for estimated sales from American Indian reservations. This translates to 79.5 packs per smoker per year or a "corrected" per capita (per adult 18+) consumption of 57.4 (instead of the tax-paid sales rate of 43.0).

<sup>&</sup>lt;sup>2</sup>Cigarette price elasticities for adults range from -0.3 to -0.4, indicating that a 10 percent increase in price leads to a 3 to 4 percent decrease in smoking. Most studies indicate that half of the decline is due to quitting and half is due to decreased consumption.

Frequency of Purchasing	Overall	New York City	Remainder of the State
American Indian Reservation			
Always	\$2.45	\$3.09	\$2.38
	[2.25–2.64]	[2.30–3.89]	[2.19–2.57]
Sometimes	\$3.88	\$4.05	\$3.86
	[3.60-4.15]	[2.61–5.49]	[3.59–4.13]
Rarely	\$4.39	\$4.93	\$4.27
	[4.10-4.67]	[3.81–6.05]	[4.01–4.52]
Never	\$5.02	\$5.78	\$4.40
	[4.91–5.12]	[5.59–5.97]	[4.32–4.48]
Out of State or Country			
Always	\$3.57	\$3.86	\$3.35
	[3.10-4.05]	[2.91–4.81]	[2.91–3.79]
Sometimes	\$4.77	\$5.38	\$4.12
	[4.44-5.10]	[4.84–5.92]	[3.81–4.43]
Rarely	\$4.93	\$6.14	\$4.12
	[4.67-5.19]	[5.74–6.53]	[3.90–4.34]
Never	\$4.39	\$5.66	\$3.87
	[4.29–4.50]	[5.44–5.88]	[3.76–3.97]
Internet			
Always	\$2.84	\$3.42	\$2.55
	[2.44–3.23]	[2.64–4.20]	[2.15–2.94]
Sometimes	\$3.55	\$3.35	\$3.74
	[2.76–4.34]	[2.06–4.65]	[2.91–4.57]
Rarely	\$4.55	\$5.03	\$4.18
	[3.84–5.26]	[3.63–6.43]	[3.56–4.79]
Never	\$4.59	\$5.80	\$3.97
	[4.50-4.68]	[5.63–5.96]	[3.89–4.06]
Toll-Free Number			
Always	\$2.34	\$2.86	\$2.19
	[1.96–2.73]	[2.00–3.72]	[1.79–2.59]
Sometimes	\$3.36	\$2.84	\$3.86
	[2.65–4.07]	[2.10-3.58]	[2.87–4.85]
Rarely	\$4.77	\$5.27	\$3.43
	[3.47–6.07]	[3.65–6.89]	[2.43–4.43]
Never	\$4.56	\$5.75	\$3.96
	[4.47–4.65]	[5.56–5.94]	[3.87–4.04]
Duty-Free			
Always	\$2.65	\$3.96	\$2.13
	[2.02–3.29]	[2.23–5.70]	[1.72–2.54]
Sometimes	\$4.00	\$3.87	\$4.07
	[3.47–4.53]	[2.79–4.94]	[3.54–4.61]
Rarely	\$4.64	\$5.58	\$3.90
	[4.21–5.06]	[4.83–6.33]	[3.52–4.28]
Never	\$4.53	\$5.71	\$3.94
	[4.44-4.63]	[5.51–5.90]	[3.85–4.03]

## Exhibit 4-19. Average Price Per Pack of Cigarettes by Smokers' Self-Reported Frequency of Tax Evasion from Low- and Untaxed Venues

- Estimates from the ATS suggest that as of Q1 2005, 57 percent of smokers report purchasing cigarettes from a low- or untaxed source at least once in the past 12 months, and 34 percent report purchasing from these locations "all the time" or "sometimes."
- Smokers who report purchasing cigarettes frequently from low- or untaxed sources pay \$1.59, or 31 percent, less per pack than those who do not.
- If tax avoidance were eliminated, the average reported price of cigarettes statewide would increase by 13 percent and lead to a 2 to 3 percent decrease in the prevalence of smoking and daily consumption of cigarettes.

The larger declines in smoking among adults and youth in New York compared to the United States as a whole, coupled with declines in overall tobacco use among adults and high school students, provide indirect evidence that the programmatic and policy changes in New York are having an impact. These results also suggest that tax evasion is fairly common and has hampered tobacco control efforts in New York by reducing the effects of recent cigarette excise tax increases in the state. However, with the available data, we are not currently able to tease out the effect of the NYTCP versus the effects of taxes and other policy changes, such as the CIAA, on the prevalence of smoking through 2004. Subsequent sections explore the progress made specific to each of NYTCP's four primary programmatic goals to further assess the impact the program has had.

## 4.2 Goal 1: Eliminate Exposure to Secondhand Smoke

## 4.2.1 Overview

In this section of the report, we address a number of evaluation questions intended to describe the programmatic efforts since the 2004 IER to reduce exposure to secondhand smoke (SHS) and address the following evaluation questions:

- 1. What programmatic and other relevant activities have been implemented in support of Goal 1?
- 2. How have SHS-related topics been covered in the print news media?
- 3. Has overall exposure to SHS among adults and youth declined over time?
- 4. Has exposure to SHS in the workplace declined over time?
- 5. Are bars/restaurants complying with the CIAA?
- 6. How have sales tax receipts changed for bars and restaurants compared to the retail sector as a whole?
- 7. What is the level of support for smoke-free policies (i.e., CIAA and restrictions on smoking in outdoor public places and building entranceways)?
- 8. How have attitudes toward SHS changed over time?

9. Are voluntary restrictions on smoking in homes and cars increasing, particularly in households with smokers?

The evaluation framework presented in Chapter 3 informs our evaluation questions. This framework describes a process where programmatic activities first lead to increases in awareness of tobacco control issues and then can lead to changes in knowledge, attitudes, beliefs, behavioral intentions, and ultimately behavior. Within the goal of eliminating exposure to SHS, the program aims to educate the public about the dangers of SHS and the benefits of smoke-free workplaces, homes, and cars. To have their intended effect, New Yorkers must first be aware of and receptive to these efforts. We expect awareness to change quickly after the implementation of activities (within 6 months). Next, we expect to see increases in knowledge and changes in attitudes and beliefs. Depending on the resources invested in an intervention and the proportion of the population exposed to the activity over time, one might expect knowledge and attitudes to change in 12 to 18 months. Finally, changes in intentions (e.g., thinking about quitting or banning smoking in the home) and behavior are likely to occur after approximately 2 years.

To address these questions, we rely on a number of evaluation and surveillance systems described in Chapter 3. To address Question 1, we use data from the CAT system and review the current Strategic Plan. Question 2 is addressed with the Tobacco News Tracking system data. The remaining questions are primarily addressed with the New York ATS and YTS.

## 4.2.2 Summary of Activities in Support of Goal 1

In the 2004 IER, we reviewed the evidence base for the strategies aimed at eliminating exposure to SHS and found that workplace smoking bans lead to a reduction in exposure to SHS by 72 percent on average and are associated with a 3.8 percentage point reduction in smoking prevalence and a decrease of 3.1 cigarettes smoked per day on average among continuing smokers. As noted in Chapter 2, with the passage of the CIAA, virtually all workplaces are smoke-free and the primary focus of the program is ensuring that compliance with the law is high. With this change, the program now focuses primarily on eliminating exposure to SHS in homes and family vehicles and in educational institutions, including campuses, events, and dormitories.

In the 2004 IER, we reported that overall 69 percent of adults reported that smoking was not allowed in their homes. However, only approximately one in four adults in homes with at least one adult smoker reported that smoking is banned in the home, pointing to an opportunity to further protect nonsmokers. Previous research indicates that smoke-free policies in the home reduce exposure to SHS and may promote cessation (Kegler and Malcoe, 2002; Farkas et al., 1999; Gilpin et al., 1999; Norman et al., 2000; Pierce, Gilpin, and Farkas, 1998). In addition, smokers who are aware of the health benefits of smoking bans may be more likely to implement them (Gilpin et al., 1999; Pizacani et al., 2002; Norman et al., 2000).

We summarize three primary sets of activities in this section: (1) Community Partner activities, (2) statewide media campaign messages focused on SHS, and (3) CIAA enforcement and waiver activity from the Center for Environmental Health (CEH).

## **Community Partner Activities**

To gain an understanding of program activities in support of Goal 1, we reviewed data from the CAT system on planned activities for fiscal year 2004–2005. These data describe planned activities for Community Partners consistent with five Goal 1 objectives, including the objective that calls for increasing support for the CIAA even though that objective was dropped in the January 2005 revised Strategic Plan. As shown in Exhibit 4-20, 18 percent of all strategies (341 of 1,946) entered into the CAT system for the 2004–2005 fiscal year focused on the goal of eliminating exposure to SHS. It should be noted that the counts of strategies presented in the table do not reflect investment of resources or intensity of the interventions. Despite this limitation, we believe it provides a general sense of how the Community Partners are focusing their efforts across objectives. Across all partners, 36 percent of SHS strategies related to smoke-free homes and vehicles; 32 percent related to increasing public support for the CIAA; and 23 percent related to increasing tobacco-free policies in educational institutions. Numbers are combined in Exhibit 4-20 for smoke-free home and smoke-free vehicle objectives because many partners are implementing activities that relate to both.

Smoke-free home and vehicle strategies are mostly categorized in the Community Education focus area and include a variety of activities, such as

- developing and distributing brochures, stickers, and smoke-free home and car kits;
- getting signatures representing smoke-free pledges; and
- educating child care providers about the dangers of SHS.

From January through May, partners reported a total of 128 paid media entries that related to the goal of eliminating exposure to SHS, or 29 percent of all paid media monthly entries. Each entry represents an ad that was aired, a mass mailing campaign, and so on, but not the number of times that particular ad aired. These paid media activities primarily included advertisements on television, radio, and newspapers. Specifically, from January to May 2005, there were 2,525 television ads aired (\$94,332); 3,205 radio ads aired (\$60,109); 67 newspaper ads (\$38,818); 700 mass mailings (data on cost not currently available); and 7 other media listings, including billboards and transit signs. Because of the lags in reporting, this does not include the approximately \$900,000 partners spent in paid media related to SHS in Q2 and Q3 2005.

Exhibit 4-20 also illustrates that most of the strategies were entered by Community Partnerships and Reality Check Youth Action Partners: 26 percent of all Community Partnership strategies, 15 percent of all Reality Check Youth Action Partners' strategies, and only 3 percent of Cessation Center strategies focused on this goal. For Community Partnerships, 46 percent of their strategies tied to this goal were specific to smoke-free homes and vehicles objectives. Reality Check Youth Action Partners reported mainly strategies to increase public support for the CIAA and to increase tobacco-free policies in educational institutions.

Objective	Cessation Centers	Community Partnerships	Reality Check Youth Action Partners	Joint Partner Strategies	Total
Increase public support for the CIAA <sup>a</sup>	1	46	61	0	108
	20%	25%	41%	0%	32%
Increase compliance with the CIAA	0	26	5	0	31
	0%	14%	3%	0%	9%
Increase the percent of households where smoking is prohibited;	4	86	33	0	123
	80%	46%	21%	0%	36%
Increase the percent of vehicles where smoking is prohibited					
Increase the number of educational institutions that effectively implement tobacco-free policies	0 0%	27 15%	51 34%	1 100%	79 23%
Total	5	185	150	1	341
	100%	100%	100%	100%	100%

# Exhibit 4-20. Planned Activities for Goal 1 by Community Partners, Fiscal Year 2004–2005

<sup>a</sup>This objective does not appear in the 2005 Strategic Plan but was approved as part of Annual Plans for fiscal year 2004–2005.

## SHS Media Messages

In this section, we summarize SHS-related television ads placed by the state and Community Partners. The evaluation team coordinates with the program to gather information on statewide and Community Partner-run tobacco control ads. This information specifies which ads are running over what time period. For the statewide media, we rely on the media schedule; for the Community Partner-run ads, we extract information from the CAT system. Based on this information, we add questions to the quarterly ATS to capture statewide estimates of New Yorkers' awareness of and reactions to these ads. Complete data on awareness and reactions to all ads (i.e., SHS and cessation) are presented in Section 4.3. The relevant statistics for SHS ads are presented below.

NYTCP's media activities in support of Goal 1 draw attention to the dangers of SHS, support the CIAA, and promote smoke-free homes and cars. The television ads aired by Community Partners primarily focus on the dangers of SHS and support for the CIAA. The program's Tobacco Control Media Plan notes that NYTCP is using a series of CDC Media Campaign Resource Center (MCRC) television and radio advertisements, including some radio ads that target people who smoke while driving with an emphasis on parents who smoke in cars while their children are riding with them. In the second quarter of 2005, four SHS-related TV ads aired statewide. At this time, we do not have data on New Yorkers' awareness of and reaction to these ads.

Overall, during the period for which we have data from the New York ATS (through Q1 2005), relatively few SHS-related ads have aired statewide (the 2004/2005 Media Plan called for an SHS campaign to run from about April through July 2005), and, although a number of Partners have run ads, they have not covered a large proportion of the state population (Exhibit 4-21). Since this time, additional SHS ads have been run (see Exhibit 2-4b). In Q3 2003, 13.3 percent of New Yorkers reported seeing at least one tobacco control ad with a theme of SHS, after which there was a gap in the airing of these ads through Q1 2004. In Q2, Q3, and Q4 of 2004 28.9, 2.9, and 3.2 percent of New Yorkers reported awareness of at least one SHS ad (for more discussion on all media efforts, see Section 4.3). Based on the literature on media evaluation and our own experience evaluating mass media campaigns, it can take 6 to 12 months to show the impact of ads on knowledge, attitudes, and beliefs. This occurs when the messages are focused on two to three primary themes or messages; the ads reach (defined as the percentage of the population that recalls the ads) a significant proportion of the target audience (in the 2004 IER, we recommended a target of 60 percent); and when the knowledge, attitude, and belief questions are consistent with these themes. Because the program has not aired ads with a consistent theme for long stretches of time (6 to 12 months), we do not expect the media to contribute to gains in related outcomes such as the specific knowledge, attitude, and belief questions captured in the ATS. The combination of media and other activities may contribute to increasing support for the CIAA, but disentangling the effect of media from other activities is difficult to do with certainty.

## CIAA Enforcement and Waiver Activity

Turning to relevant activities that are not directed by NYTCP, CEH is responsible for enforcing the CIAA, reviewing and approving waivers to the CIAA, issuing fines, and responding to complaints. CEH is responsible for 21 counties that do not have local health departments. CEH also gathers comparable data from local health departments, including New York City, which they provided to us for this analysis. We are reporting trends in these

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Title	Time	Goal Area	NYSDOH/ Community Partner	Message Strategies	Emotion/ Impact
Bartender	Q3 2003	SHS	Community Partners	Personal testimony, long-term effects (heart attacks)	Low
Outside the Bar	Q3 2003	SHS	Community Partners	Humor	Low
Waitress	Q3 2003	SHS	Community Partners	Long-term effects of SHS, appeal for CIAA	Low
Baby Seat	Q2 2004	SHS	NYSDOH	Family endangerment, industry quote, health effects to infants	High
Sign of the Times	Q2 2004	SHS	NYSDOH	Social norms	Low
Little Girl	Q2 2004	SHS	NYSDOH	Personal testimony, short-term effects of SHS	Low
Front Porch	Q2 2004	SHS	NYSDOH	Personal testimony, family endangerment	Low
Never Smoke	Q2 2004	SHS	NYSDOH	Personal testimony, short-term effects of SHS	Low
Clean Indoor Air Testimonials for Business	Q3 2004	SHS	Community Partners	Personal testimony	Low
Heather Crowe	Q3 2004 Q4 2004	SHS	Community Partners	Personal testimony, long-term effects	High
CIAA Testimonials in Mall	Q3 2004	SHS	Community Partners	Personal Opinions	Low
Paul Decker	Q3 2004	SHS	Community Partners	Personal Testimony, long term effects of SHS (lung cancer)	High
Smoke Free New York	Q3 2004	SHS	Community Partners	Child Endangerment	Low

# Exhibit 4-21. NYSDOH and Community Partner SHS Television Advertising in New York, Q3 2004–Q1 2005

data from July 2003 to December 2004 to provide context that will help interpret subsequent analyses presented below. All statistics on enforcement and waiver activity reported in Exhibits 4-22 through 4-25 combine data on the CIAA and New York City's Smoke-free Air Act.

Exhibit 4-22 shows the pattern of reported complaints for the first 18 months of CIAA implementation. These data show that the number of complaints hit a peak in January to March 2004 and reached their lowest point 1 year after implementation, only to increase in the next quarter. Although the latest number of complaints is half of the peak, these data suggest that there are continued violations of the law.

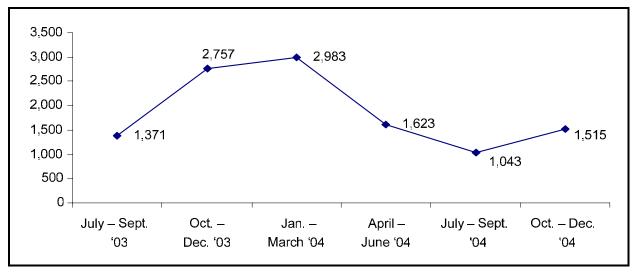


Exhibit 4-22. Number of CIAA-related Complaints

CEH and local health departments conduct investigations of CIAA violations both independently and in response to complaints. Exhibit 4-23 shows a somewhat different pattern compared to consumer complaints—the number of investigations remained relatively stable through Q3 2004, hovering around 20,000 investigations per quarter before dropping in the last quarter of 2004 to 11,524 investigations.

The most telling figure is the number of CIAA violations over time (Exhibit 4-24). This shows that violations began to drop steadily beginning in the second quarter of 2004. These data suggest that compliance continues to improve but that violations still exist at 300 per quarter. Given the total number of establishments subject to the CIAA and the large number of investigations that are conducted, it appears based on these data that compliance is fairly high.

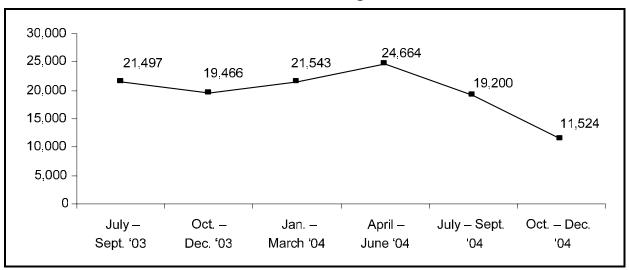
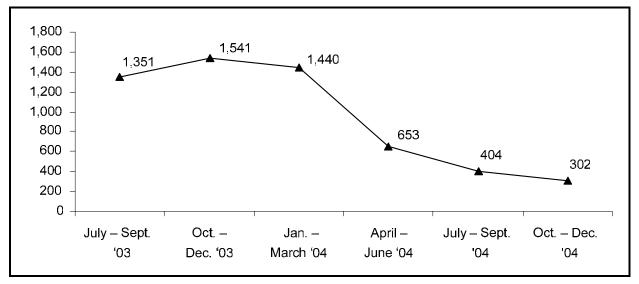


Exhibit 4-23. Number of CIAA-related Investigations

Exhibit 4-24. Number of CIAA Violations



Finally, because some establishments request waivers from the CIAA that permit smoking indoors under certain circumstances (i.e., in a separately ventilated room where no service is provided), we present trends in the number of waiver applications received and granted (Exhibit 4-25). Overall, very few waivers have been granted, and this likely has a minimal impact on smoking in the workplace.

In subsequent sections, we present trends in self-reported observations of smoking in workplaces, bars, and restaurants from the New York ATS to further evaluate compliance with the CIAA.

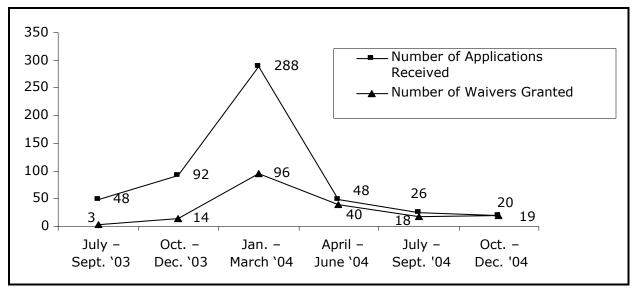


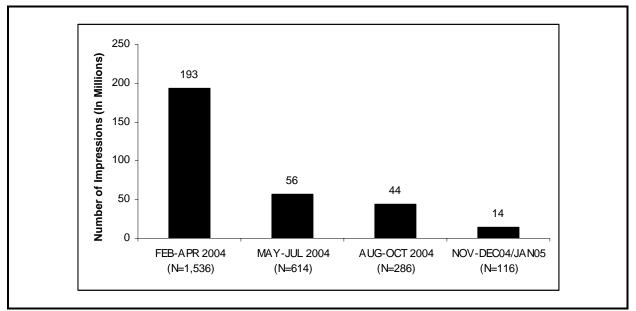
Exhibit 4-25. Number of CIAA Waiver Applications Received and Granted

### 4.2.3 How Have SHS-Related Topics Been Covered in the Print News Media?

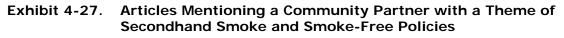
Our Tobacco News Tracking system currently provides data on the volume of tobaccorelated news articles from February 2004 to January 2005. As described in Chapter 3, all articles are coded for a primary theme. One of those themes is "Secondhand Smoke and Smoke-Free Policies." We can better understand and interpret changes in attitudes related to SHS, in part, by documenting the amount and slant of tobacco-related news coverage. We explored the potential reach of SHS-related news stories as measured by article impressions. Article impressions were calculated by adding circulation estimates among all articles published in a particular newspaper. Exhibit 4-26 shows a steady decline in the number of article impressions of news stories covering SHS-related topics among all tobacco-related articles. This is likely due to decreased coverage related to the CIAA and New York City's smoke-free law. There was considerable coverage of the 1-year anniversary of the New York City (March 31, 2004) and New York State (July 24, 2004) laws, after which coverage declined.

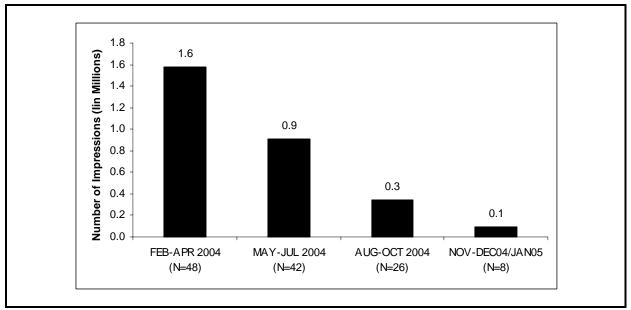
In addition to coding the primary theme, we record whether one of the funded Community Partners was mentioned in the article as a proxy for their involvement in generating news coverage of the topic. Exhibit 4-27 illustrates the number of article impressions (defined as the number of articles multiplied by the circulation of the corresponding periodical) of SHSrelated articles that specifically mentioned a Community Partner. Such news coverage tended to occur in specific months, usually in conjunction with major SHS-related milestones. For instance, based on the pattern of Community Partner citations in the SHSrelated news coverage, it appears that there was a concerted effort to draw attention to the

# Exhibit 4-26. Number of Tobacco-Related Articles with a Theme of Secondhand Smoke and Smoke-Free Policies, February 2004–January 2005



Note: N = actual number of articles.





Note: N = actual number of articles.

1-year anniversary of the CIAA. These efforts occurred primarily in July 2004, when 28 out of 200 SHS-related articles mentioned a Community Partner. A majority of these articles were news stories presenting opposing viewpoints concerning the CIAA, where a Community Partner member was quoted on various issues such as the positive results of the CIAA or the dangers of SHS. Only a small number of these articles were editorials or letters to the editor authored by Community Partnership members highlighting the success of the CIAA.

Media advocacy, which includes editorial board visits, the cultivation of relationships with the media, the issuance of press releases and letter writing campaigns, can be an effective strategy to promote changes in attitudes, behavior, and public policy by reframing ways that the public perceives and thinks about SHS issues (Durrant et al., 2003). Chapman and Dominello (2001) point out that issuing a press release to major newspapers can significantly increase coverage of tobacco in the news. Chapman and Dominello (2001) found that six press releases generated 58 stories in a 5-week period or 20.5 percent of all tobacco-related news stories during the study period. Although we have not yet linked partner's media advocacy to changes in media coverage and/or changing attitudes, we will be able to do this as more data become available on Community Partner efforts to influence news media coverage (via CAT).

An example of how media advocacy can be an effective strategy comes from California. Public health advocates were able to enact the California Smokefree Workplace Law and defend it against tobacco industry efforts to repeal it in part by engaging the public through the media and using this public pressure to influence the state legislature (Magzamen, Charlesworth, and Glantz, 2001). Media efforts conducted by tobacco control advocates, including local health departments, consisted of holding press conferences, releasing polls showing public support for the law, and using grassroots networks to write letters and visit editorial boards (Magzamen and Glantz, in press). Although there is some evidence that news media coverage of tobacco issues can influence decisions concerning public policies, no published literature has established a link between the slant of tobacco-related news coverage and changes in smoking attitudes and beliefs (Durrant et al., 2003).

## 4.2.4 Has Overall Exposure to SHS Among Adults and Youth Declined Over Time?

## Adult Exposure to SHS

To assess changes in adults' exposure to SHS over time, we present data on self-reported number of hours that adults overall, nonsmokers, and smokers spent in a room where someone was smoking in the past 7 days. These data are based on the quarterly ATS with one exception. We collected 1,024 interviews prior to the July 24, 2003, implementation of the CIAA. One might expect that trends in exposure to SHS and other outcomes may have changed as a result of the CIAA. However, it is important to keep in mind that Nassau and Westchester Counties and New York City implemented comprehensive smoke-free laws prior

to the start of ATS data collection. Because these areas include more than half of the state's population, some of the impact of smoke-free laws will not be captured in our data, which only capture the effect of the statewide CIAA on the remainder of the state.

Exhibit 4-28 shows that the average number of hours of exposure has remained relatively stable, around 4 hours, from Q3 2003 to Q1 2005. The trend in the number of hours exposed to SHS in a vehicle is also stable over this period, hovering around 1 hour (Exhibit 4-29).

However, these aggregate data mask differences in exposure to SHS over time between nonsmokers and smokers. Exhibit 4-30 shows that exposure for nonsmokers dropped from the period prior to the CIAA to Q1 2004 and shows a statistically significant trend across all periods. In contrast, average hours that smokers spent in a room where someone was smoking in the past 7 days nearly doubles from the first period to the last quarter of data collection (Exhibit 4-31), suggesting that smokers are now smoking more in groups. Although it is reasonable to assume that the CIAA may have influenced where and when smokers choose to smoke, it is somewhat surprising to observe such a marked change. The data on exposure to SHS in vehicles among nonsmokers and smokers (Exhibits 4-32 and 4-33) show no significant change among nonsmokers but an increasing trend among smokers (p < 0.001).

## Youth Exposure to SHS

The YTS asks youth to report how many days they spent in a room (and car) with a smoker in the past 7 days ("During the past 7 days, on how many days were you in the same room with someone who was smoking cigarettes?" and "During the past 7 days, on how many days did you ride in a car with someone who was smoking cigarettes?"). From 2000 to 2004, self-reported exposure to SHS in both rooms and cars has steadily decreased for middle and high school students. Exhibit 4-34 shows a statistically significant decrease in the average number of days middle school students (p < 0.001) and high school students (p < 0.001) report being in a room with a smoker in the past 7 days. A similar pattern is true for the average number of days middle school students (p = 0.003) and high school students (p < 0.004) were in a car with a smoker in the past 7 days (Exhibit 4-35).

National trends in exposure to SHS are not yet available against which we could compare progress in reducing exposure to SHS. However, the declines in exposure to SHS in New York are consistent with an impact of the CIAA.

# Exhibit 4-28. Average Number of Hours in the Past 7 Days That Adults Spent in a Room Where Someone Was Smoking, ATS Q3 2003–Q1 2005

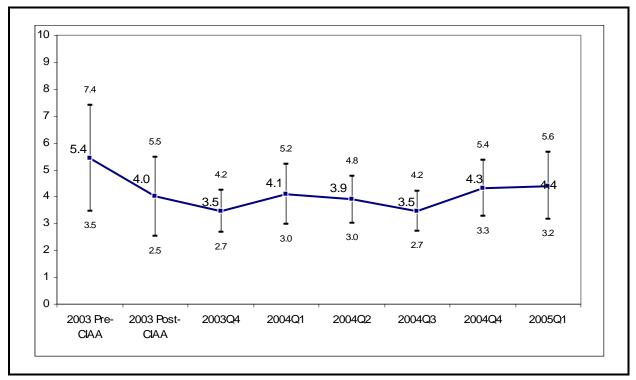
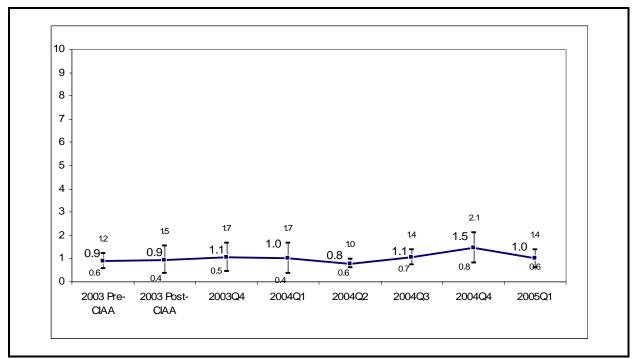
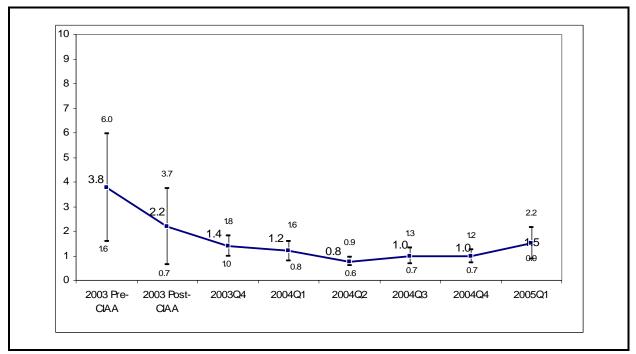


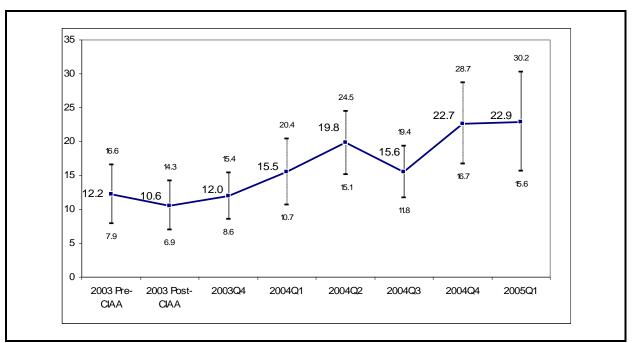
Exhibit 4-29. Average Number of Hours in the Past 7 Days That Adults Spent in a Vehicle Where Someone Was Smoking, ATS Q3 2003–Q1 2005



### Exhibit 4-30. Average Number of Hours in the Past 7 Days That Adult Nonsmokers Spent in a Room Where Someone Was Smoking, ATS Q3 2003–Q1 2005



#### Exhibit 4-31. Average Number of Hours in the Past 7 Days That Adult Smokers Spent in a Room Where Someone Was Smoking, ATS Q3 2003–Q1 2005



### Exhibit 4-32. Average Number of Hours in the Past 7 Days That Adult Nonsmokers Spent in a Vehicle Where Someone Was Smoking, ATS Q3 2003–Q1 2005

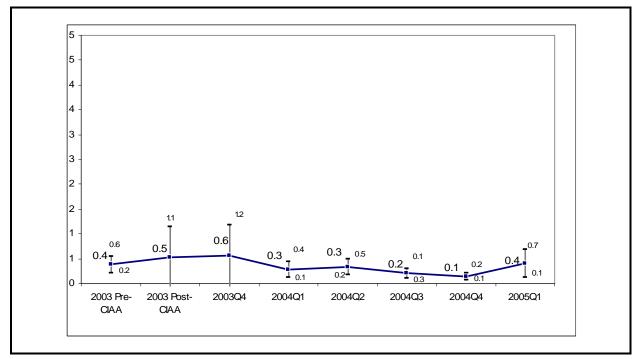
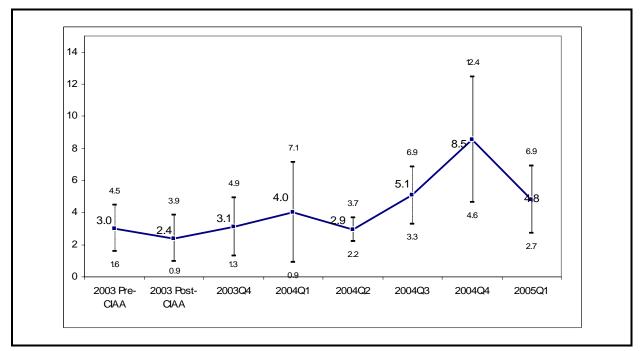


Exhibit 4-33. Average Number of Hours in the Past 7 Days That Adult Smokers Spent in a Vehicle Where Someone Was Smoking, ATS Q3 2003–Q1 2005





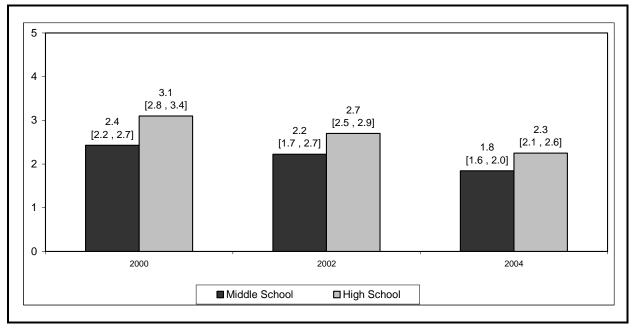
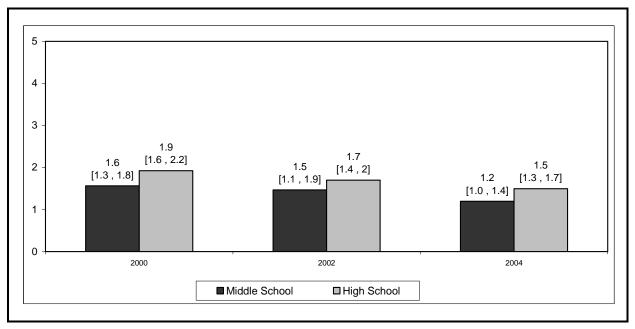


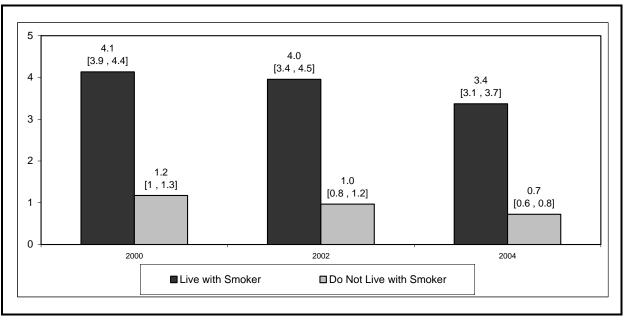
Exhibit 4-35. Number of Days in the Past Week Middle and High School Students Were in a Car with a Smoker, YTS 2000–2004



Although progress has clearly been made in reducing SHS exposure in rooms and cars among middle and high school students, it is important to examine whether the same holds true for middle school and high school students who live in households with smokers. As illustrated in Exhibits 4-36 and 4-37, the average number of days of exposure to SHS in a room declined from 2000 to 2004 for middle and high school students living with and without a smoker (p < 0.001 in all cases). However, the average number of days of exposure is considerably higher, as expected, for youth living with a smoker. A similar pattern holds true for exposure to SHS in cars for middle and high school students living with and without a smoker (p < 0.02) (Exhibits 4-38 and 4-39).

Although the average number of days of exposure to SHS in rooms and cars is declining, youth who live with smokers continue to be subject to high levels of exposure. Because it is likely that the majority of this exposure occurs in the home, voluntary restrictions on smoking in homes and cars (discussed below) must increase to reduce youth's risk of chronic respiratory problems due to SHS exposure.







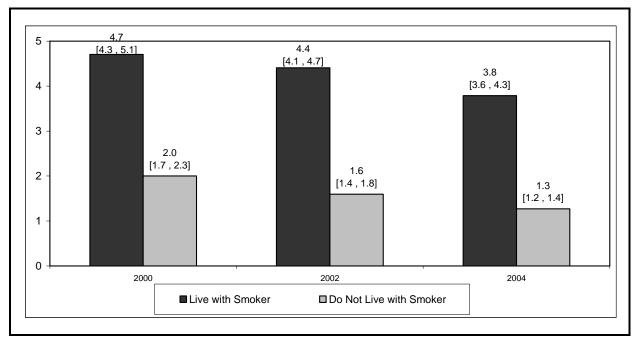
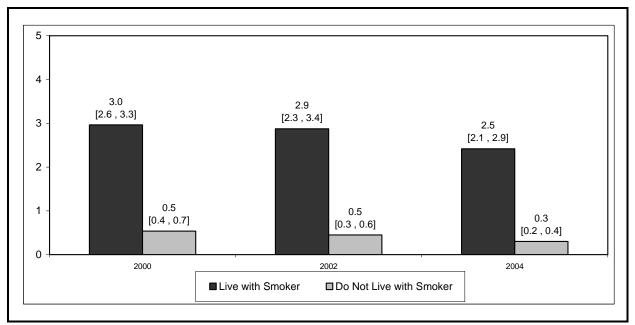
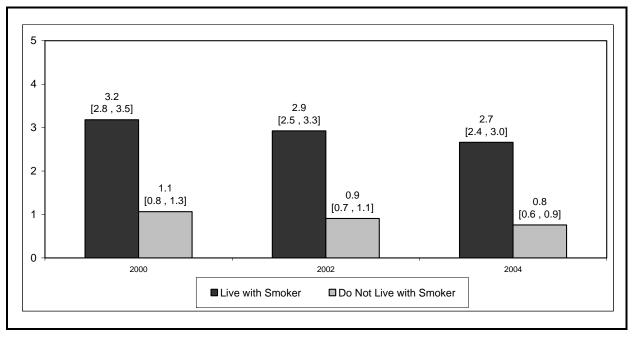


Exhibit 4-38. Number of Days in the Past Week Middle School Students Were in a Car with a Smoker by Household Smoking Status, YTS 2000–2004



# Exhibit 4-39. Number of Days in the Past Week High School Students Were in a Car with a Smoker by Household Smoking Status, YTS 2000–2004



## 4.2.5 Has Exposure to SHS in the Workplace Declined Over Time?

The ATS asks workers who work primarily indoors to report whether they observed smoking in the past 7 days in their work area. Exhibit 4-40 shows results similar to the 2004 IER: approximately 10 percent of workers continue to report observing smoking in their workplace despite the CIAA that bans smoking in virtually all workplaces. In addition, there is no statistically significant downward trend in this measure. These reported results do not differ significantly by smoking status of the ATS respondent.

The results for observing smoke in the workplace are consistent with the data on 100 percent smoke-free workplaces. Exhibit 4-41 reports the percentage of workplaces (for indoor workers) that are 100 percent smoke-free. This percentage fluctuated between 78 and 85 percent from Q3 2003 to Q1 2005 and shows no statistically significant trend nor any differences based on smoking status of the respondent.

## 4.2.6 Are Bars and Restaurants Complying with CIAA?

## Exposure to SHS in Bars and Restaurants

We conducted the Employee Health Study to assess changes in tobacco smoke exposure among a cohort of nonsmoking hospitality workers (workers in restaurants, bars, or bowling facilities) after the statewide CIAA went into effect. To assess self-reported exposure to

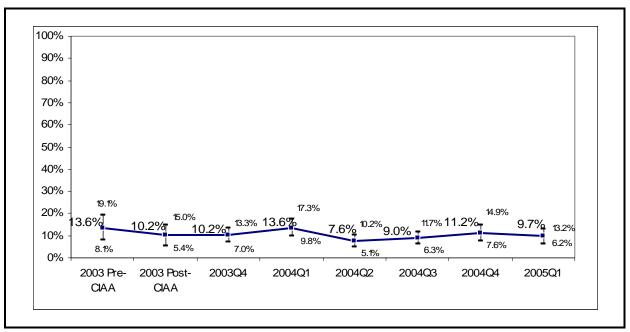
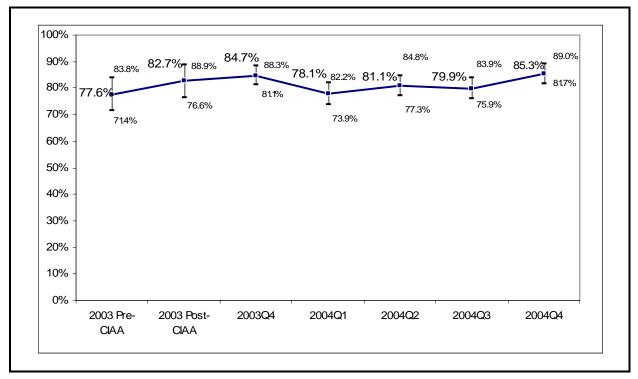


Exhibit 4-40. Percentage of Indoor Workers Who Reported Seeing Smoking in their Work Area in the Past Week, ATS Q3 2003–Q1 2005

Exhibit 4-41. Percentage of Indoor Workers with Smoke-Free Workplaces, ATS Q3 2003–Q4 2004



tobacco smoke in the workplace and other settings, hospitality workers participated in a survey prior to implementation of the CIAA (baseline) and 3, 6, and 12 months after the CIAA went into effect. In addition, tobacco smoke exposure was measured by mean cotinine (a metabolite of nicotine) levels (ng/ml), which were obtained from saliva samples after each of two work shifts. Results from the baseline and 3-month follow-up were presented in the 2004 IER. Below we summarize results of the complete study (Farrelly et al., 2005). Analyses are restricted to the 24 participants who completed all waves of the study (saliva cotinine test and survey) and had cotinine levels  $\leq$  15 ng/mL. Above this level suggests that the participant was either an active smoker or was taking NRT—two exclusion criteria for the study.

From baseline to the 12-month follow-up, total exposure to SHS from all sources declined by 94 percent from 14.5 hours to 0.8 hours (p < 0.001) (Exhibit 4-42). The decrease in SHS exposure in hospitality workplaces represents an even greater change in exposure levels before and after the smoking prohibition went into effect. SHS exposure in those workplaces declined by 98 percent (p < 0.001), from 12.1 to 0.2 hours.

Exposure to SHS	Baseline	3-Month	6-Month	12-Month	P-Value <sup>a</sup>	Trend <sup>b</sup>
Total hours exposed to SHS	14.5 [10.5,18.6]	2.9 [–0.27,6.0]	1.4 [0.2,2.6]	0.8 [0.0,1.6]	<0.001	<0.001
Hours exposed to SHS at hospitality workplaces	12.1 [8.0,16.3]	1.6 [-1.01,4.2]	0.1 [-0.1,0.2]	0.2 [-0.1,0.5]	<0.001	<0.001

Exhibit 4-42. Mean Exposure to Secondhand Smoke for Respondents by Wave

<sup>a</sup>P-values from baseline to 12-month follow-up from Wilcoxon Sign Rank Test.

<sup>b</sup>P-values from Cuzick nonparametric trend test across all waves.

Consistent with the declines in self-reported SHS exposure, cotinine levels significantly decreased between baseline and 12-month follow-up. Overall, mean cotinine levels decreased from 3.6 ng/ml at baseline to 0.8 ng/ml at 12-month follow-up (p < 0.001) (Exhibit 4-43).

Exhibit 4-43. Change in Mean Cotinine Levels by Wave

Cotinine Level (nanograms per milliliter)	Baseline	3-month	6-month	12-month	P-value <sup>a</sup>	Trend <sup>b</sup>
Mean cotinine level	3.6 [2.6,4.7] 24	1.7 [1.4,2.0] 24	1.9 [1.4,2.3] 24	0.78 [0.4,1.2] 24	<0.001	<0.001

<sup>a</sup>P-values from baseline to 12-month follow-up from Wilcoxon Sign Rank Test.

<sup>b</sup>P-values from Cuzick nonparametric trend test across all waves.

In addition to assessing changes in SHS exposure, we also assessed self-reported changes in experiencing sensory irritation (eyes, nose, and/or throat) and respiratory symptoms (wheeze, shortness of breath, morning cough, cough during the remainder of the day or night, and/or phlegm). Changes in sensory irritations and respiratory symptoms were assessed using the same survey that assessed self-reported exposure to tobacco smoke. The questions were adapted by Eisener et al. (1998) from respiratory and sensory symptom questions from the International Union Against Tuberculosis and Lung Disease Bronchial Symptoms Questionnaire. To measure the overall change in symptoms as a result of the law, indicators of whether the respondents experienced any sensory symptoms and any respiratory symptoms were created. To measure the average number of symptoms that participants reported before and after smoking was restricted, two symptoms scales using the sum of respiratory or sensory symptoms were created.

Exhibit 4-44 reports the changes in self-reported sensory and respiratory symptoms after the CIAA went into effect. Between baseline and the 12-month follow-up, the percentage of hospitality workers who reported experiencing any one of the sensory symptoms decreased from 88 percent to 38 percent (p < 0.001), and the percentage of workers experiencing individual sensory symptoms significantly decreased. Furthermore, the total number of sensory symptoms experienced by hospitality workers (symptom scale) declined by 69 percent (p < 0.01) from baseline (1.6 symptoms) to the 12-month follow-up (0.5 symptoms). There were no statistically significant changes in hospitality workers experiencing respiratory symptoms after the CIAA went into effect.

The results of the study demonstrate that the law is having its intended effect of reducing employee exposure to a toxic substance in the workplace. Three months after implementation of a statewide law prohibiting smoking in restaurants, bars, and bowling facilities, workers in these establishments experienced substantial reductions in exposure to SHS measured by self-reported exposure and saliva cotinine. In addition, exposure continued to decline through 12 months after implementation and was accompanied by declines in sensory and respiratory symptoms.

To complement the data from the Employee Health Study, we present the percentage of restaurant and bar patrons who observed smoking in these venues in the past 30 days from the ATS through Q1 2005. In the 2004 IER, we reported that the CIAA reduced exposure to SHS in bars, restaurants, bowling alleys, and bingo parlors and that compliance was high with the exception of bars and bingo parlors.

Exhibit 4-45 shows that after implementation of the CIAA, a very low percentage of restaurant patrons report observing smoking. In contrast, Exhibit 4-46 presents a sharp and steady decrease in reports of smoking by bar patrons through Q2 2004 (p < 0.001) and a steady increase thereafter from 13.4 (Q2 2004) to 27.7 (Q1 2005) (p < 0.001). These findings suggest that investigations of compliance by CEH and local health departments

	Baseline	3-Month	6-Month	12-Month	P-Value <sup>a</sup>	Trend <sup>⊳</sup>
Sensory Symptoms						
Proportion with red or irritated eyes	0.67 [0.44,0.83]	0.21 [0.08,0.43]	0.12 [0.04,0.34]	0.25 [0.11,0.47]	0.004	0.002
Proportion with runny nose, sneezing, or nose irritation	0.54 [0.33,0.74]	0.42 [0.23,0.63]	0.50 [0.30,0.70]	0.12 [0.04,0.34]	0.002	0.009
Proportion with sore or scratchy throat	0.42 [0.23,0.63]	0.33 [0.17,0.56]	0.25 [0.11,0.47]	0.17 [0.06,0.39]	0.058	0.046
Proportion that experienced any one of sensory symptoms	0.88 [0.66,0.96]	0.67 [0.44,0.83]	0.54 [0.33,0.74]	0.38 [0.20,0.59]	<0.001	<0.001
Sum of sensory symptoms (sensory symptom scale)	1.63 [1.22,2.03]	0.96 [0.57,1.34]	0.88 [0.46,1.29]	0.54 [0.19,0.89]	<0.001 <sup>c</sup>	<0.001
Upper Respiratory Symptoms						
Proportion that experienced wheezing or whistling in chest	0.21 [0.08,0.43]	0.08 [0.02,0.30]	0.21 [0.08,0.43]	0.12 [0.04,0.34]	0.157	0.708
Proportion that felt short of breath	0.17 [0.06,0.39]	0.12 [0.04,0.34]	0.17 [0.06,0.39]	0.08 [0.02,0.30]	0.157	0.507
Proportion that experienced coughing in morning	0.21 [0.08,0.43]	0.12 [0.04,0.34]	0.08 [0.02,0.30]	0.08 [0.02,0.30]	0.083	0.17
Proportion that experienced coughing at all during the rest of the day or at night	0.29 [0.14,0.52]	0.25 [0.11,0.47]	0.38 [0.20,0.59]	0.21 [0.08,0.43]	0.414	0.762
Proportion that experienced bringing up any phlegm	0.21 [0.08,0.43]	0.17 [0.06,0.39]	0.21 [0.08,0.43]	0.21 [0.08,0.43]	No Change	0.909
Proportion that experienced any one of respiratory symptoms	0.46 [0.26,0.67]	0.46 [0.26,0.67]	0.50 [0.30,0.70]	0.29 [0.14,0.52]	0.157	0.313
Sum of respiratory symptoms (respiratory symptom scale)	1.08 [0.4,1.76]	0.75 [0.25,1.25]	1.04 [0.45,1.63]	0.71 [0.13,1.29]	0.117**	0.412

### Exhibit 4-44. Self-Reported Sensory Symptoms for Respondents of Both Waves

<sup>a</sup>P-values from baseline to 12-month follow-up from McNemar Chi-Square Test unless otherwise noted.

<sup>b</sup>P-values from baseline to 12-month follow-up from Wilcoxon Sign Rank Test.

<sup>c</sup>P-values from Cuzick nonparametric trend test across all waves.

should focus foremost on bars. Some of this increase may be explained by waivers to the CIAA that permit smoking under certain circumstances, but the number of waivers (presented above) is not likely to be enough to explain such a large increase in smoking. Although the pattern of CIAA violations reported by CEH does not follow this upward trend after Q1 2004, the number of reported complaints does increase in Q4 2004 after falling from Q2 to Q3 2004.

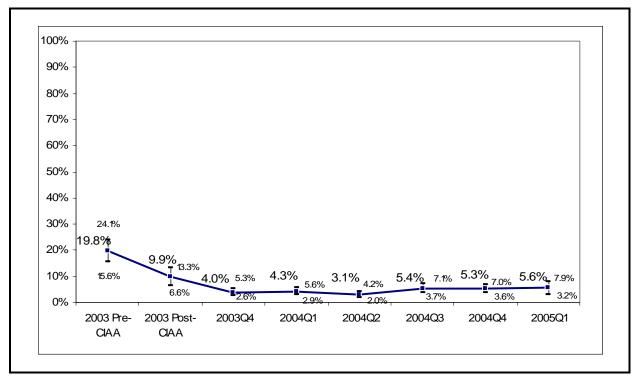
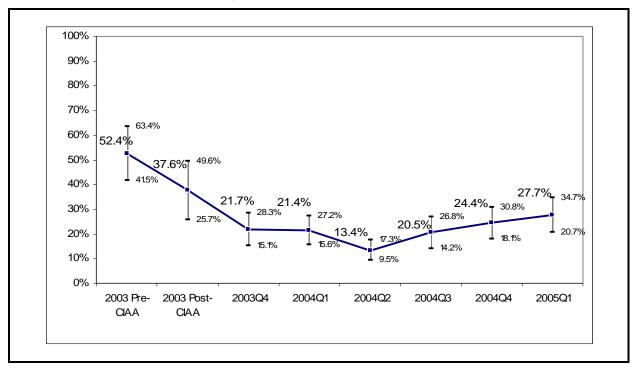


Exhibit 4-45. Percentage of Restaurant Patrons Who Saw Smoking Indoors in the Past 30 Days, ATS Q3 2003–Q1 2005

Exhibit 4-46. Percentage of Bar Patrons Who Saw Someone Smoking Indoors in the Past 30 Days, ATS Q3 2003–Q1 2005



## 4.2.7 How Have Sales Tax Receipts Changed for Bars and Restaurants Compared to the Retail Sector as a Whole?

New York's Office of Tax Policy Analysis in the Department of Taxation and Finance compiled quarterly data on sales tax receipts from Q2 1999 to Q3 2004 for bars, full-service restaurants, limited-service restaurants, and total retail trade, not including bars and restaurants. The data are based on a panel of 9,946 vendors in New York State from full-service restaurants and limited-service restaurants. To be included in the panel, vendors must have filed a tax return for each of the 22 quarters of data. Our analysis is limited to bars and full-service restaurants.

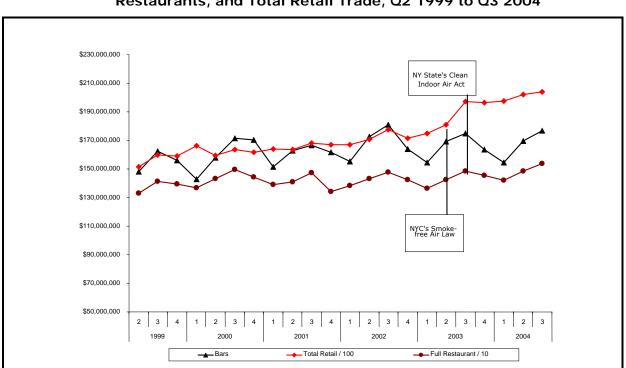
To facilitate comparisons of trends in sales in bars, full-service restaurants, and the total retail sector, we scaled the sales figures for full-service restaurants (divided by 10) and the total retail sector (divided by 100). Exhibit 4-47 shows no apparent effect of the comprehensive clean indoor air laws in New York City or New York State on these trends. To more formally test the potential impact of these laws on sales receipts in bars and full-service restaurants, we performed two separate time-series regressions for each of these venues (sales receipts for bars and for full-service restaurants are regressed on quarterly indicator variables to control for seasonal effects, indicator variables for the dates of implementation for the New York City and State laws, and a time trend. In the case of bars, a quadratic time trend fit the data best, whereas a linear time trend was more appropriate for the restaurant sales receipts). These models confirm that there is no statistically significant relationship between sales and the comprehensive clean indoor air laws.

### 4.2.8 What Is the Level of Support of Smoke-Free Policies (i.e., CIAA and Restrictions on Smoking in Outdoor Public Places and Building Entranceways)?

## Support for CIAA

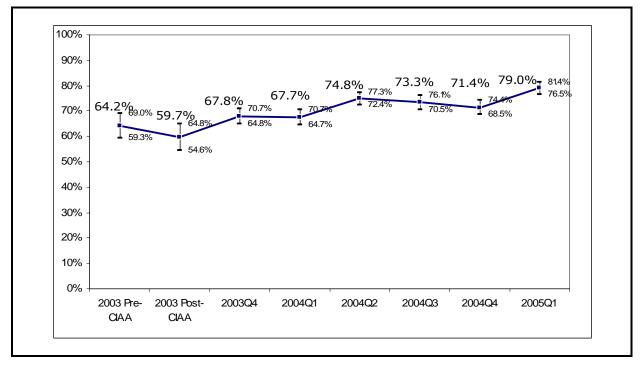
In the 2004 IER, we reported that more than two thirds of New Yorkers favored the CIAA and that support was increasing among smokers and nonsmokers alike. Those trends have continued, with support peaking in Q1 2005 at 79 percent among all adults (Exhibit 4-48), 84.1 percent among nonsmokers (Exhibit 4-49), and 46.5 percent among smokers (Exhibit 4-50).

The high and growing support for the CIAA validates NYTCP's modification to the Strategic Plan to remove increasing support for the CIAA as a specific objective.

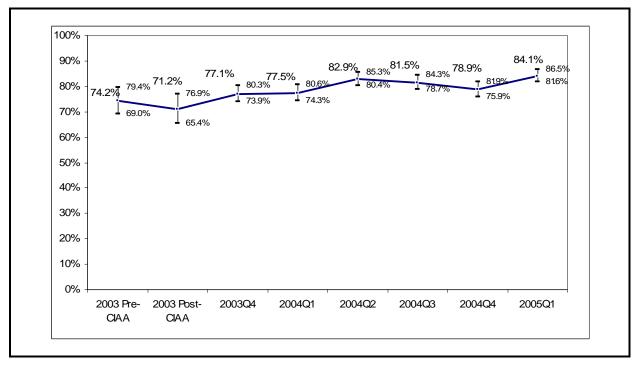


# Exhibit 4-47. Trends in New York State Sales Tax Receipts for Bars, Full-Service Restaurants, and Total Retail Trade, Q2 1999 to Q3 2004

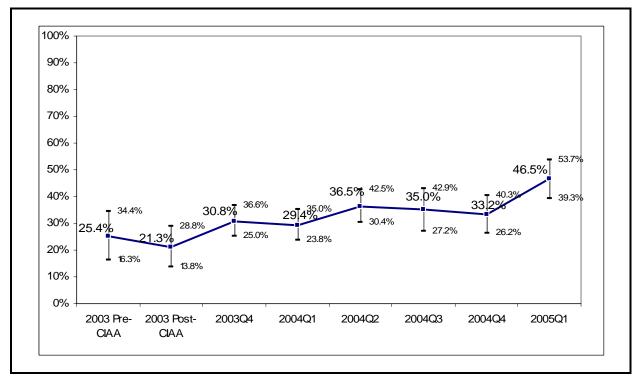
# Exhibit 4-48. Percentage of Adults Who Favor the Clean Indoor Air Act, ATS Q3 2003–Q1 2005



# Exhibit 4-49. Percentage of Adult Nonsmokers Who Favor the Clean Indoor Air Act, ATS Q3 2003–Q1 2005



# Exhibit 4-50. Percentage of Adult Smokers Who Favor the Clean Indoor Air Act, ATS Q3 2003–Q1 2005



Starting in 2004, the YTS also asks youth two questions about the CIAA:

- Does New York State have a law prohibiting smoking in public and private workplaces, including restaurants?
- Are you for or against a law prohibiting smoking in public and private workplaces or doesn't it matter to you?

The results show that 87.1 and 92.1 percent of middle and high school students are aware of the law, respectively (Exhibit 4-51). However, in contrast to adults, a lower percentage of youth are in favor of the law—35.4 and 41.0 percent of middle and high school students favor the law (Exhibit 4-52). Furthermore, almost 30 percent of middle and high school students reported that a law prohibiting smoking in public and private workplaces did not matter to them. So while the level of positive support is not as high as among adults, there is relatively little disapproval of the law.

### Support for Other Public Policies Restricting Smoking

Turning to locations not currently covered by public policy, the ATS asks respondents "would you be in favor of a law banning smoking in outdoor public places such as beaches and parks?" and "would you be in favor of a law banning smoking in the entranceways of public buildings and workplaces?" We added these questions in Q1 2005 to assess the level of support for such laws. The baseline level of support (responses "definitely yes" or "probably yes") for restricting smoking in outdoor public places is 51.6 percent overall and 56.2 and 23.8 percent for nonsmokers and smokers, respectively (Exhibit 4-53). Support for restrictions in entranceways was considerably higher—75.5 percent overall and 78.9 and 54.0 percent for nonsmokers and smokers respectively (Exhibit 4-54).

### 4.2.9 How Have Knowledge of and Attitudes Toward SHS Changed Over Time?

The ATS includes a number of SHS-related knowledge and belief questions. One set includes five questions about the consequences of being exposed to SHS. They begin with "Would you say that breathing smoke from other people's cigarettes causes..."

- heart disease,
- lung cancer,
- colon cancer,
- respiratory problems in children, and
- sudden infant death syndrome (SIDS)?

#### Exhibit 4-51. Middle and High School Students' Awareness of the Clean Indoor Air Act, YTS (2004)

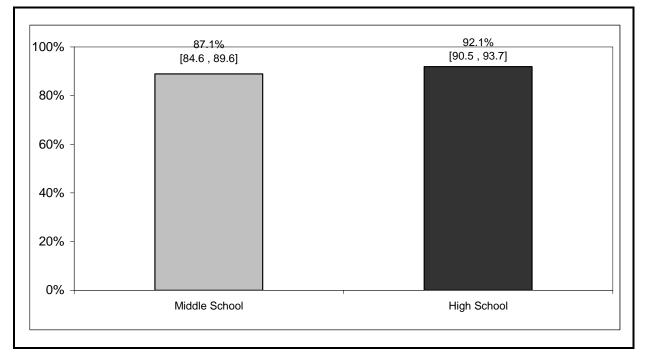
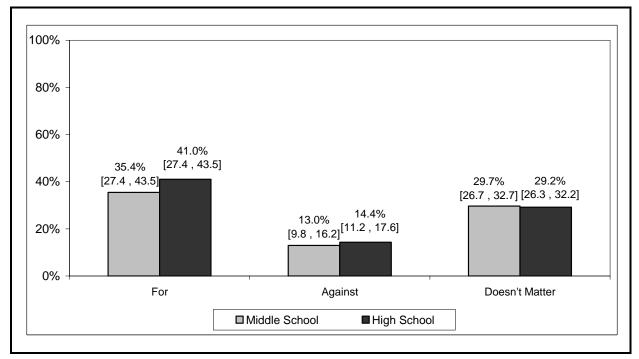
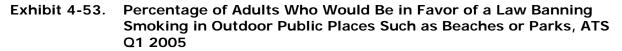
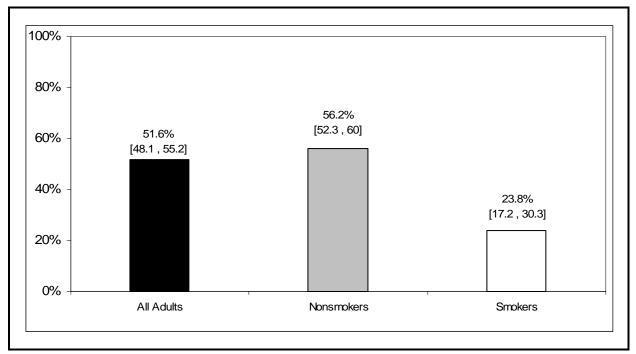


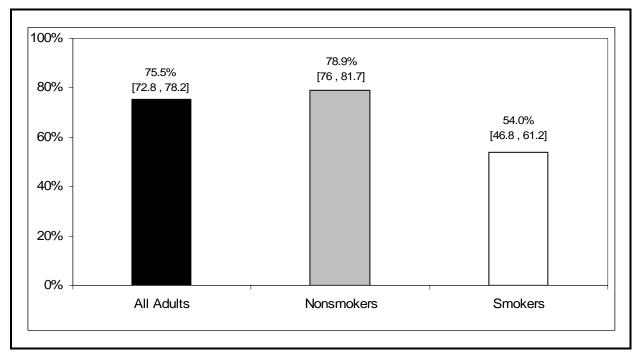
Exhibit 4-52. Middle and High School Students' Attitudes Toward the Clean Indoor Air Act, YTS (2004)







#### Exhibit 4-54. Percentage of Adults Who Would Be in Favor of a Law Banning Smoking in the Entranceways of Public Buildings and Workplaces, ATS Q1 2005



It is important to note that none of the television ads aired by NYTCP (and partners) through Q1 2005 (currently available ATS data) contained messages that specifically stressed SIDS. There have been some ads that have included messages about heart disease ("Bartender" in Q3 2003 and Q2 2004), lung cancer ("Heather Crowe" in Q3-Q4 2004 and "Paul Decker" in Q3 2004), and respiratory problems in children ("Never Smoke" and "Baby Seat" in Q2 2004). SHS is not a risk factor for colon cancer, so this question serves as a comparison against which to compare trends in other questions. However, given the low level of awareness of SHS messages (noted above), we would not necessarily expect to see large changes in knowledge as a result of programmatic efforts.

Below, we present overall trends in these questions and examine whether recalling SHS or cessation tobacco control media messages is correlated with increased knowledge. We test these correlations by estimating logistic regressions by smoking status for each of the SHS knowledge indicators as a function of recall of SHS and cessation media messages, controlling for other factors (age, gender, race/ethnicity, education, income, a time trend, and an indicator for living in New York City).

For all of these knowledge items, nonsmokers have greater knowledge than smokers (as expected), but we chose to only present data for smokers and nonsmokers separately when there is a significant trend in the particular knowledge item for either smokers or nonsmokers. This is true only for the belief that SHS causes heart disease.

Exhibit 4-55 shows that, overall, the percentage of adults who believe that SHS causes heart disease fluctuated over time, but there is a small but statistically significant upward trend (p < 0.05). The trend for nonsmokers is not statistically significant, but generally follows the trend for all adults. However, Exhibit 4-56 shows that the percentage of smokers who believe that SHS causes heart disease increased sharply after Q1 2004 and then remained at that higher level—a statistically significant trend over time (p < 0.03). Our regression analysis for this item shows that smokers who recall seeing SHS media messages had a greater odds (OR = 1.7, p < 0.005) of knowing that SHS is a risk factor for heart disease. Awareness of cessation messages was not a significant predictor. There were no significant relationships between awareness of media messages and knowledge for nonsmokers.

Although Exhibits 4-57 and 4-58 show no statistically significant trends for either all adults or smokers, the pattern of the trend for smokers is similar to that of heart disease and suggests a potential correlation with periods when the media campaign was on the air. Accordingly, we ran a regression analysis and found that recall of both SHS and cessation ads was correlated with increased knowledge for smokers. Those who recalled SHS ads had a statistically significant increased odds of agreeing that SHS was a risk factor for lung cancer (OR = 2.1, p < 0.001). The same was not true for recall of cessation ads. There

# Exhibit 4-55. Percentage of Adults Who Believe Secondhand Smoke Causes Heart Disease, ATS Q3 2003–Q1 2005

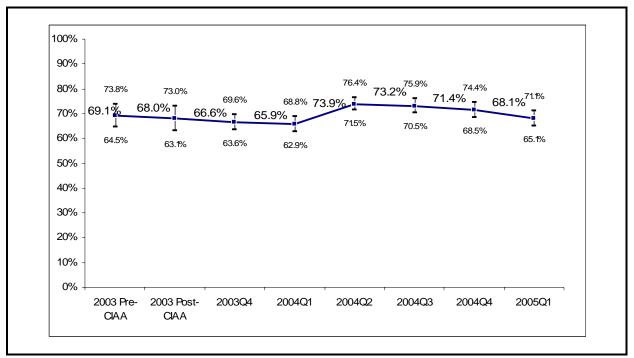
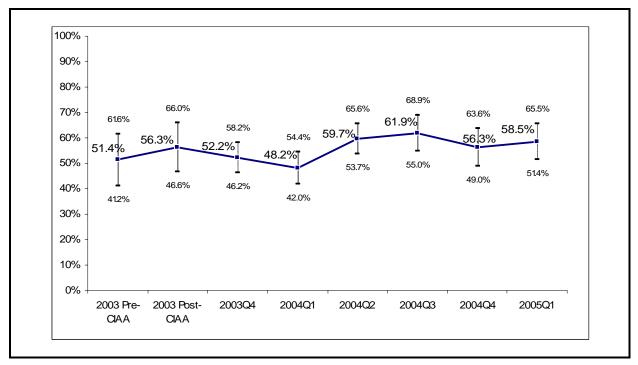


Exhibit 4-56. Percentage of Adult Smokers Who Believe Secondhand Smoke Causes Heart Disease, ATS Q3 2003–Q1 2005



#### Exhibit 4-57. Percentage of Adults Who Believe Secondhand Smoke Causes Lung Cancer, ATS Q3 2003–Q1 2005

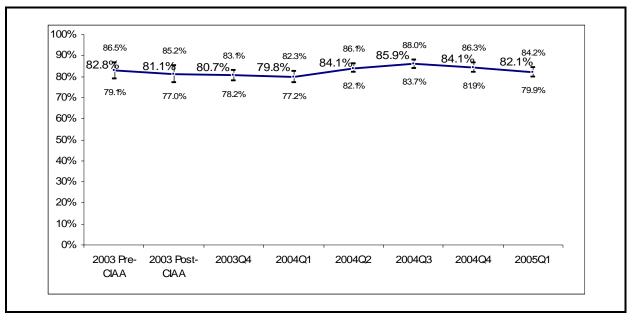
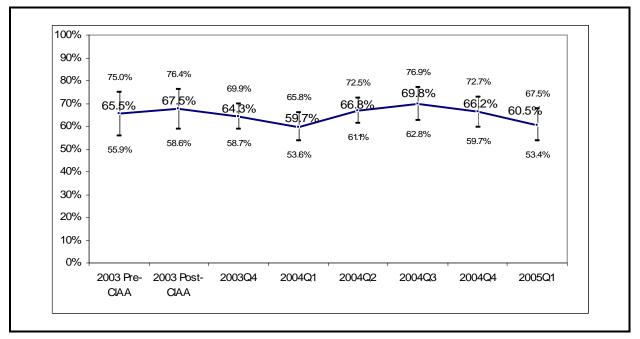


Exhibit 4-58. Percentage of Adult Smokers Who Believe Secondhand Smoke Causes Lung Cancer, ATS Q3 2003–Q1 2005



were no statistically significant trends for knowledge of SHS as a risk factor for respiratory problems in children, SIDS, or colon cancer (data not shown).

With the dramatic increase in the discussion about the dangers of SHS surrounding the passage of the CIAA (and similar local laws), one might expect to see changes in the social norms around SHS more generally. Consequently, we added a new series of attitudinal questions beginning in Q3 2004:

- When someone is smoking around you (nonsmokers), do you:
  - do nothing
  - go someplace else
  - ask them not to smoke around you
  - tell them to put out their cigarette immediately?
- About how often in the past 12 months has anyone asked you not to smoke when you were smoking or were about to smoke? (smokers)
- How comfortable do you (smokers) feel smoking around friends who don't smoke?
- About how often do you smoke when you are in the company of children?
- About how often do you smoke when you are in the company of friends or others that do not smoke?

From Q3 2003 to Q2 2004, we asked whether adults were bothered by exposure to SHS.

Exhibits 4-59 through 4-61 indicate that for the first three quarters after implementation of the CIAA, there were increasing trends in the percentages of adults overall (p < 0.001) and nonsmokers (p < 0.001) who reported being bothered by exposure to SHS. The percentage of smokers who reported being bothered by SHS did not change significantly.

Given the short time frame when these newer questions were asked and the lack of statewide media messages for two of the three quarters, it is not surprising that none of these questions show a statistically significant trend. We will revisit these questions in the next IER after a sufficient time has elapsed to assess changes over time.

Finally, turning to youth, the YTS asks middle school and high school students "Do you think the smoke from other people's cigarettes is harmful to you?" The percentage of youth who thought that SHS is harmful did not significantly increase among middle school and high school students overall (Exhibit 4-62). However, the percentage of high school students who thought SHS is harmful did increase significantly from 2000 (90.5 percent) to 2004 (93.1 percent) (p < 0.03).

# Exhibit 4-59. Percentage of Adults Who Are Bothered by Secondhand Smoke, ATS Q3 2003–Q2 2004

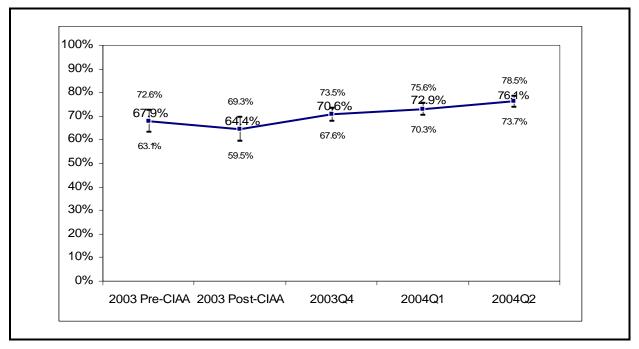
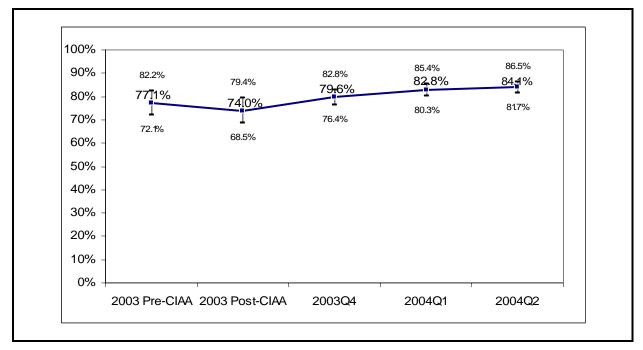
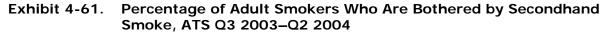
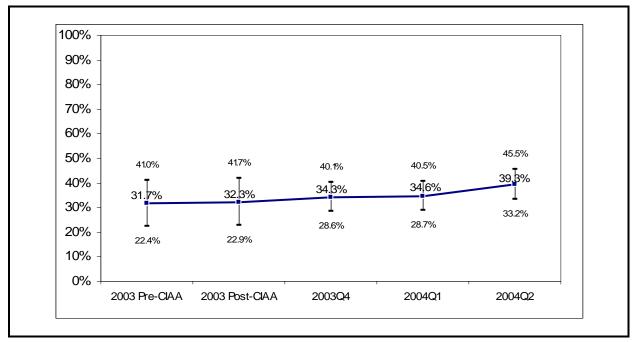


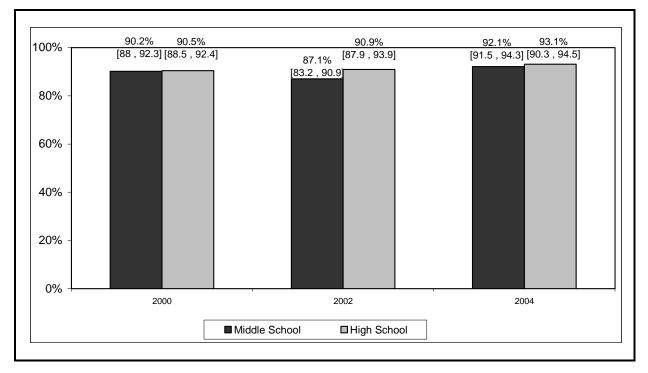
Exhibit 4-60. Percentage of Adult Nonsmokers Who Are Bothered by Secondhand Smoke, ATS Q3 2003–Q2 2004







# Exhibit 4-62. Percentage of Middle and High School Students Who Think Secondhand Smoke is Harmful, YTS 2000–2004



## 4.2.10 Are Voluntary Restrictions on Smoking in Homes and Cars Increasing, Particularly in Households with Smokers?

Our final evaluation question addresses a central focus for NYTCP after implementation of the CIAA: voluntary home and car restrictions on smoking. With smoking virtually banned in all workplaces and public buildings, the remaining sources of exposure to SHS include private homes and cars and outdoor public places, such as entranceways of buildings, beaches, and parks. Because a significant source of exposure to SHS for infants and children is in homes and cars, these venues represent an important programmatic focus, particularly now that the CIAA has been in place for more than 2 years. As noted above, more significant mass media efforts began in Q2 2005, outside the time frame for the available ATS data in this report. In addition, Community Partners began focusing on SHS restrictions in homes and cars beginning with their new contracts that began in late 2004. Thus, we do not expect significant changes in home and car environments as a direct result of programmatic efforts at this time.

Exhibit 4-63 indicates that, by Q1 2005, 72 percent of adults report living in homes where smoking is not allowed; across all quarters of data, there is an increasing trend (p < 0.01). However, in a year and a half, this percentage increased only 7 percent in relative terms. Exhibits 4-64 and 4-65 illustrate that smokers are much less likely to report living in a smoke-free home than nonsmokers, as expected. However, there are no statistically significant trends in the percentage of smokers or nonsmokers reporting smoke-free homes, suggesting that the overall modest downward trend is a result of the decline in the percentage of smokers over time and not a result of changes in smoke-free policies.

Similarly, the percentage of adults who do not permit smoking in their cars is increasing over time ( $\rho < 0.001$ ) (Exhibit 4-66). In relative terms, this percentage increased at a faster rate (12 percent) than the trend for smoke-free homes. The trend was also statistically significant ( $\rho < 0.001$ ) for nonsmokers (Exhibit 4-67) but not for smokers (Exhibit 4-68).

## 4.2.11 Summary, Conclusions, and Recommendations

Since the 2004 IER, the program has shifted its focus from supporting implementation of the 2003 CIAA to promoting smoke-free policies in private homes and vehicles and effectively implementing smoke-free policies in schools. This transition was formalized in the January 2005 Strategic Plan to reflect progress in implementation of the CIAA. As a result, the Community Partnerships and Reality Check Youth Action Partners have been shifting their focus accordingly. As a consequence, the full force of the program and its partners has not yet focused on promoting smoke-free policies in private homes and vehicles or implementing smoke-free policies in schools. In addition, the contracts to create new Community Partners that focus on smoke-free schools are still in process. While these transitions have been taking place, coverage of SHS in the news media has also changed. As the CIAA becomes the new reality for New Yorkers, coverage of SHS in the news has dropped dramatically. This stresses the importance of programmatic efforts to draw attention to the benefits of smoke-free homes and cars and the dangers of SHS in these settings.

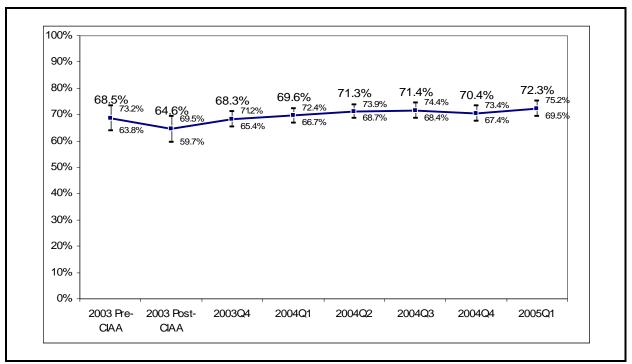
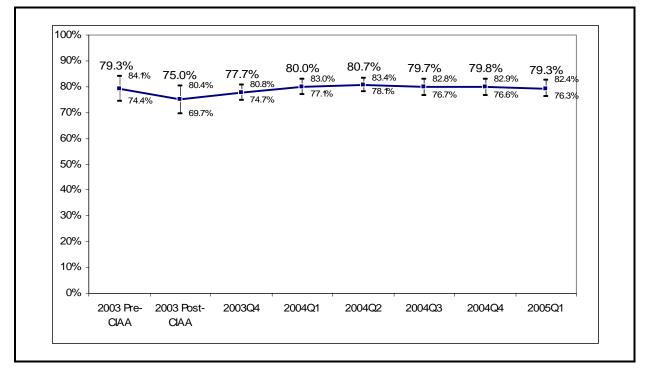


Exhibit 4-63. Percentage of Adults in Smoke-free Homes, ATS Q3 2003–Q1 2005

Exhibit 4-64. Percentage of Adult Nonsmokers in Smoke-free Homes, ATS Q3 2003–Q1 2005



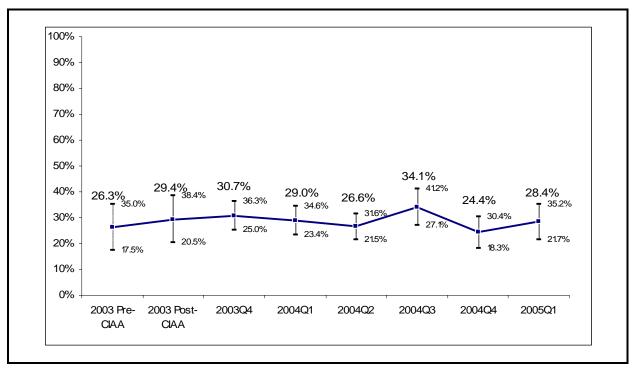
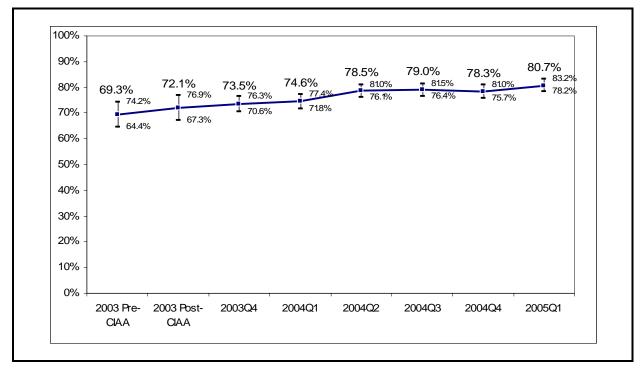


Exhibit 4-65. Percentage of Adult Smokers in Smoke-free Homes, ATS Q3 2003– Q1 2005

Exhibit 4-66. Percentage of Adults in Smoke-free Cars, ATS Q3 2003–Q1 2005<sup>a</sup>



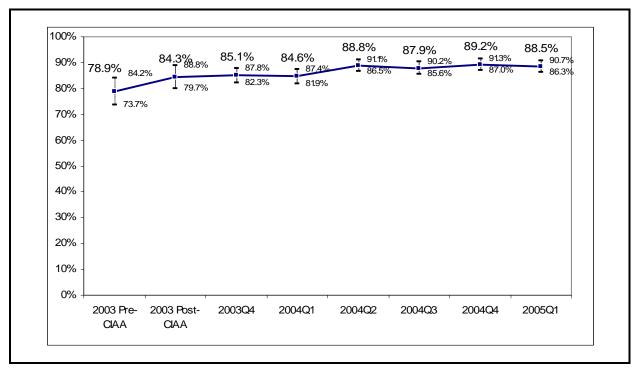
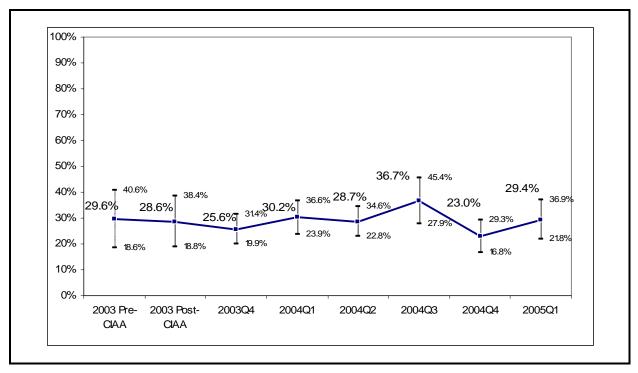


Exhibit 4-67. Percentage of Adult Nonsmokers in Smoke-free Cars, ATS Q3 2003– Q1 2005

## Exhibit 4-68. Percentage of Adult Smokers in Smoke-free Cars, ATS Q3 2003–Q1 2005



Consistent with this shift in focus, we have seen continued progress in outcomes related to the CIAA (in most cases) and little to no changes in smoke-free homes and cars. Finally, we found that exposure to NYTCP-sponsored SHS ads was associated with an increase in the odds that smokers acknowledged SHS as a risk factor for lung cancer and heart disease. Below, we highlight the main findings and recommend future steps.

### Exposure to Secondhand Smoke

- Overall exposure to SHS in rooms and cars has remained stable from Q3 2003 to Q1 2005.
  - However, the overall trend in exposure to SHS in homes masks a decline in exposure to SHS among nonsmokers and a curious increase in exposure among smokers, suggesting that smokers are congregating more to smoke.
  - We found that there was only a decline in exposure to SHS among nonsmokers who do not ban smoking in their homes (to levels comparable with nonsmokers who ban smoking in their homes).
  - In addition, while the trend in exposure to SHS in cars among nonsmokers remained stable, exposure among smokers increased.
- Exposure to SHS among youth declined from 2000 to 2004, with an apparent acceleration in the decline in exposure after 2002 when the CIAA was implemented.
  - There were parallel declines for youth living with and without smokers, although exposure to SHS remains considerably higher for youth living with a smoker.
  - Although adult smokers report being exposed to higher levels of SHS, this has not translated into higher exposure for youth living with adult smokers.
- Exposure to SHS in the workplace remains at 10 percent, the level reported in the 2004 IER.

### CIAA

- Findings from the complete Employee Health Study of hospitality workers confirm the results from the 2004 IER—that exposure to SHS declined precipitously after the CIAA.
  - Sensory symptoms that result from exposure to SHS also declined over time.
- The number of reported CIAA-related complaints increased steadily from Q3 2003 (implementation) to Q3 2004 and then declined for the next two quarters only to increase again in Q4 2004.
- The CIAA had no impact on sales in bars and full-service restaurants.
- Reports of observing smoking from restaurant patrons declined after Q3 2003 and have remained at low levels (4 to 6 percent) ever since.
- In contrast, reports of smoking in bars declined steadily from Q3 2003 to Q2 2004, after which they doubled from 13.4 percent in Q2 2004 to 27.7 percent in Q1 2005.
- From Q3 2003 to Q1 2005, support for the CIAA has increased overall and among smokers and nonsmokers, with the largest increase in support among smokers (who begin with lower baseline levels of support).

### Knowledge and Beliefs About SHS Risks

- Two of the four SHS-related beliefs about the health effects of SHS measured in the ATS increased from Q3 2003 to Q1 2005—the beliefs that SHS causes heart disease and lung cancer.
  - The increase in the belief that SHS causes heart disease was most pronounced for smokers, the most important target group.
  - Exposure to NYTCP media was associated with increased knowledge of SHS as a risk factor for heart disease and lung cancer among smokers.
  - These limited changes are consistent with the fact that the program and its partners were not able to run a significant amount of SHS-related media with themes consistent with these beliefs. In particular, no messages were targeted to the belief that SHS causes sudden infant death syndrome (SIDS), and only a few were targeted to the belief that SHS causes respiratory problems in children.
- Changes in knowledge would likely have been more systematic had the program and its funded partners been able to air media messages more consistently.
- One attitude that measures whether adults are bothered by SHS increased from Q3 2003 to Q2 2004 (after which more specific questions replaced this general question) among adults overall, smokers, and nonsmokers. This increase is likely because of changing norms as a result of the CIAA.
- Finally, the one SHS-related attitude measured in the YTS only changed among high school students; the percentage who thought SHS is harmful increased between 2000 and 2004. However, this attitude had a baseline value of about 90 percent for students overall, leaving little room for improvement.

#### Voluntary Restrictions on Smoking in Homes and Cars

- Voluntary restrictions increased slightly in homes and cars from Q3 2003 to Q1 2005.
- These modest changes are consistent with programmatic efforts that are gradually focusing less on the CIAA and more on smoke-free homes and cars and effective implementation of smoke-free school policies.

#### Goal 1 Recommendations

We recommend that NYTCP do the following:

- Conduct follow-up observational studies of exposure to SHS in bars and/or encourage their colleagues in the Center for Environmental Health to increase efforts to monitor compliance with the CIAA in this setting in particular.
- Minimize efforts in support of smoke-free public places while increasing efforts to promote smoke-free homes and cars with a focus on households with smokers. This venue represents the most significant continued source of exposure to SHS.
  - Mass media messages should either specifically encourage smoke-free home/car policies or target attitude and beliefs that will likely lead to an increase in these policies.
- Continue to encourage Community Partners to draw attention to SHS-related issues through media advocacy to increase coverage in news media.

- Air effective (e.g., high impact) television ads like those run in Q2 2005 steadily over time.
  - Consider families of messages that are consistent over time and linked to important attitudes and beliefs that the program wants to change.
- Determine whether it is a priority to identify and investigate the workplaces where smoking continues to occur.

## 4.3 Goal 2: Decrease the Social Acceptability of Tobacco Use

### 4.3.1 Overview

In this section, we describe programmatic efforts undertaken since the 2004 IER to decrease the social acceptability of tobacco use. We address the following evaluation questions related to Goal 2:

- 1. What activities are being implemented in support of Goal 2?
- 2. How has the news media covered tobacco issues in New York?
- 3. Have tobacco sponsorships decreased over time?
- 4. What is the level of point-of-purchase tobacco advertising and promotions prior to the Advertising, Sponsorship, and Promotion (ASP) initiative?
- 5. Has awareness/receipt of pro-tobacco advertising and promotions declined over time?
- 6. Has awareness of and receptivity to antismoking messages increased over time?
- 7. Has knowledge about the health risks of smoking and antitobacco attitudes and beliefs increased over time?

These evaluation questions are informed by the general evaluation framework presented in Chapter 3. For Goal 2 (decreasing the social acceptability of tobacco use), we focus on the role of programmatic activities and policies in increasing knowledge of the health risks of smoking and antitobacco attitudes and beliefs. As illustrated in the evaluation framework, outputs related to tobacco control program activities, in conjunction with characteristics of the social environment (i.e., current levels of tobacco advertising, sponsorship, and promotions), are anticipated to lead to increased awareness. Awareness is a prerequisite for changes in knowledge, attitudes, and beliefs. By increasing knowledge about tobaccorelated issues and by increasing antitobacco attitudes and beliefs, NYTCP intends to decrease the social acceptability of tobacco use in New York. Ultimately, changing the perceived social acceptability of tobacco use is expected to have a direct impact on tobacco use behaviors. Research has demonstrated that perceived social acceptability of tobacco use is a strong predictor of adolescent smoking and smoking initiation (Bauman, Botvin, Botvin, & Baker, 1992; Eisenberg and Forster, 2003). We first assess the tobacco control environment by characterizing activities designed, planned, and conducted to influence attitudes related to the social acceptability of tobacco use (Question 1). Exposure to tobacco control activities is anticipated to be associated with changes in related awareness and attitude measures. However, many of the key activities related to Goal 2 are relatively new, and therefore measures of exposure are not always available. In these instances, we focus on measures of awareness—awareness of protobacco advertising, sponsorships, and promotions. We will assess the extent to which the news media in New York have covered tobacco issues (Question 2). The amount and tone of media coverage of tobacco issues is an indicator of how tobacco issues are portrayed and what types of information individuals are being exposed to. As noted previously, media advocacy can be an effective strategy to promote changes in attitudes, behavior, and public policy by reframing ways that the public perceives and thinks about tobacco issues (Durrant et al., 2003).

Tobacco sponsorships (Question 3) and point-of-purchase advertising and promotions (Question 4) are prominent means by which the tobacco industry seeks to influence perceptions of the social acceptability of their products. We establish baseline measures of point-of-purchase advertising using in-store observational data. In future evaluations, we will be able to link data from the in-store observations with measures of awareness of point-of-purchase promotions from the ATS and YTS. We may also be able to conduct regional comparisons—correlating in-store data with CAT data on the number and types of activities Community Partners are conducting. No systematic approach is currently in place to track tobacco company sponsorships. Therefore, we assess this question by looking at trends in awareness of tobacco sponsorships. Again, this measure of awareness serves as a proxy measure for exposure (as level of awareness should be correlated with levels of actual exposure).

In addition to in-store data, we will evaluate adult awareness of tobacco promotions (Question 5) using a series of questions from the ATS. Some of these measures correspond to measures that are captured through the in-store observational data and others are unique (e.g., direct mail from tobacco companies). It is hypothesized that awareness of tobacco promotions will be indicative of the level of exposure to these promotions.

The effectiveness of media and educational campaigns is predicated on the ability of these campaigns to capture the attention of the target audience(s). An evaluation of an educational intervention should include an assessment of the degree to which the intervention messages are being recalled by the audience. If awareness of and/or receptivity to campaign messages is low, it is unlikely that there will be meaningful changes in knowledge, attitudes, or behaviors. Therefore, we evaluate the level of awareness of key campaign messages (Question 6) to estimate the reach of these campaigns and their potential impact.

Finally, we evaluate trends in antitobacco attitudes and beliefs (Question 7). These attitudes and beliefs are measured with the ATS and YTS and, taken as a whole, provide measures of the degree of social acceptability of tobacco use. We will also relate changes in attitudes over time to awareness of media messages sponsored by NYTCP. In this section, we include attitudes related to smoking in the movies. A key focus of NYTCP has been on increasing awareness of the problem of smoking in the movies, with the objective of changing attitudes regarding the acceptability of smoking images in movies and ultimately fostering support for policy change that reduces child and adolescent exposure to smoking images in movies.

To address the evaluation questions for Goal 2, we use several evaluation and surveillance systems described in Chapter 3. Data from the CAT system will be used to address the first evaluation question, providing a description of activities that have been implemented to decrease the social acceptability of tobacco use and to assess the degree to which activities implemented are consistent with the Strategic Plan. Question 2 will be addressed using information from the Tobacco News Tracking study. Question 3 will be assessed primarily with data from the ATS, which provides estimates for the number of adults who have noticed tobacco sponsorships. In-store observational data (RATS) from fall 2004 and ATS data will be used to address Question 4. Questions 5 through 7 will be addressed primarily with data from ATS and YTS.

### 4.3.2 Summary of Activities in Support of Goal 2

Programs and activities under Goal 2 aim to decrease the social acceptability of tobacco use through efforts to reduce tobacco advertising and promotions, promote restrictions on the number of places where smoking is allowed, and communicate tobacco control messages to the public. Strong research evidence now suggests that changes in the social environment can have both a direct effect on smoking behavior and an indirect effect via changes in attitudes regarding the social acceptability of smoking. For instance, many of the policy changes most directly related to efforts to reduce exposure to SHS, such as smoke-free workplace laws and voluntary policies targeting smoking in homes, schools, and workplaces, have also been associated with reductions in smoking prevalence (Wakefield et al., 2000; Farkas et al., 2000; Evans, Farrelly, and Montgomery, 1999; Farrelly, Evans, and Sfekas, 1999). It has been suggested that these results may reflect a shift in the perceived acceptability of smoking—that as the number of places and opportunities that people witness people smoking decreases, social norms promoting nonsmoking will be fostered, ultimately leading to a reduction in smoking initiation (Eisenberg and Forster, 2003; Levy, Friend, and Polishchuk, 2001). In support of this hypothesis, several recent studies provide evidence of a clear association between the frequency of observing smoking and the perception that smoking is socially acceptable (Alesci, Forster, and Blaine, 2003; Albers et al., 2004; Thomson et al., 2005). Perceived social acceptability of smoking has been consistently shown to be a strong predictor of adolescent smoking and smoking initiation (Bauman et al., 1992; Eisenberg and Forster, 2003).

Recognizing the importance of the social environment in shaping smoking behaviors, NYTCP has created a Strategic Plan emphasizing efforts aimed to decrease the social acceptability of smoking. As noted in Chapter 2, the Strategic Plan has recently been updated to provide clearer objectives related to reducing tobacco advertising and promotions occurring in (1) bars, fraternities, and other "adult only" facilities; and (2) newspapers and magazines. An original emphasis on reducing tobacco advertising at the "point-of-purchase" in retail stores has been expanded to target all types of retail advertising, and a new objective aimed at increasing voluntary policies that prohibit tobacco use in outdoor areas has been added to the Strategic Plan.

NYTCP designed a set of television advertisements and movie theater slides to counter tobacco industry point-of-purchase marketing and the depiction of tobacco use in movies. The program was planning to use the television ads in a campaign to increase awareness of tobacco company advertising in the retail environment. One ad, titled "Walk to School," depicts the abundance of tobacco ads youth are exposed to during a typical walk home from school. Movie slides are being used to increase awareness of the impact of smoking in movies on youth. These activities were designed to be coordinated with the recently launched ASP initiative, which includes a community-level effort designed to increase community awareness in the short-run about the impact of tobacco advertising in the retail environment on youth initiation and tobacco use. In the long-run, the goal of the point-of-purchase component of ASP is to reduce the amount of retail advertising and reduce smoking initiation of youth and young adults and the prevalence of adult smoking.

NYTCP also funds Community Partners to participate in various aspects of the ASP initiative, which is primarily aimed at Goal 2. Community Partnerships are responsible for carrying out community and retail interventions, with other partners providing support as needed. Efforts aimed at decreasing exposure to tobacco advertising in periodicals (magazines and newspapers) and efforts aimed at decreasing the numbers of movies that contain smoking or tobacco placement are led primarily by the Reality Check Youth Action Partners, with other partners providing support. Below, we describe the planned breakdown of partner activities relative to the objectives under Goal 2.

Exhibit 4-69 illustrates the number of planned activities by Community Partners for each Goal 2 objective. Forty-two percent of all strategies entered into CAT for the 2004–2005 fiscal year focused on the goal of decreasing the social acceptability of tobacco use. Within Goal 2, the most frequently reported objective was to "increase antitobacco attitudes among youth and adults," with 43 percent of all social acceptability strategies reported within this objective. Community Partnerships classified 31 percent of their strategies within this objective, using approaches such as community education, government policy-maker education, and paid media most often.

Objective	Cessation Centers	Community Partnerships	Reality Check Youth Action Partners	Joint Partner Strategies	Total
Increase antitobacco attitudes among youth and adults	3 60%	79 31%	261 49%	7 39%	350 43%
Increase number of sporting, cultural, entertainment, art, and other events that have written policy prohibiting tobacco industry sponsorship	0 0%	39 15%	21 4%	3 17%	63 8%
Reduce tobacco promotions in sporting, cultural, entertainment, art, and other events in community, region, and state	2 40%	29 11%	55 10%	3 17%	89 11%
Reduce the amount of tobacco advertising in the retail environment	0 0%	97 38%	61 11%	3 17%	161 20%
Increase number of magazines and newspapers that have a written policy prohibiting acceptance of tobacco industry or product advertising	0 0%	1 0%	133 25%	1 6%	135 17%
Increase number of local laws, regulations, and voluntary policies that prohibit tobacco use in outdoor areas and in proximity to building entryways	0 0%	12 5%	2 0%	0 0%	14 2%
Reduce tobacco promotions occurring in bars, fraternities, and other "adult only" facilities	0 0%	1 0%	1 0%	1 6%	3 0%
Total	5 100%	258 100%	534 100%	18 100%	815 100%

# Exhibit 4-69. Planned Activities for Goal 2 by Community Partners for Fiscal Year 2004–2005

Community Partnership activities included

- presentations to youth groups, parent groups, and community agencies;
- community forums;
- letters to the editor; and
- television and print ads, including awareness of tobacco marketing practices and International Day of Action.

Community Partnerships also focused heavily on reducing the amount of tobacco advertising in the retail environment, with 38 percent of their social acceptability strategies having that objective. To address tobacco retail advertising, Community Partnerships most frequently reported using the focus areas of Community Education, Monitoring/Assessment of Organizational Policies and Practices, Advocating with Organizational Decision Makers, and Paid Media. These activities included

- conducting RATS to assess tobacco point-of-purchase advertising in the community;
- organizing press events to announce the RATS initiative or share RATS findings;
- educating community organizations, neighborhood groups, faith organizations, and school boards;
- holding ASP recognition events to reward retailers with policies restricting tobacco point-of-purchase advertising;
- building support and mobilizing the community to take action and enact point-ofpurchase resolutions; and
- implementing interventions with retailers.

For Reality Check Youth Action Partners, the objectives most often selected were to "increase antitobacco attitudes among youth and adults" (49 percent of Youth Partner strategies within this goal and 25 percent of all Youth Partner strategies overall) and to "increase the number of magazines and newspapers that have a written policy prohibiting acceptance of tobacco industry product advertising" (25 percent of Youth Partner strategies within this goal). For the objective related to increasing antitobacco attitudes, there was a wide range of activities described in Annual Plans, with the great majority in the focus area of Community Education. Strategies included

- conducting school library assessments of tobacco advertising in magazines;
- holding press events about magazine tobacco advertising;
- making presentations to educate the school community, including the parent teacher association (PTA), school board members, families, students, and community members;
- mobilizing schools to take action against tobacco advertising in magazines;
- using various media outlets to share information (letters to the editor, school newspapers, press conferences);
- disseminating information on Web sites or in person (palm cards, flyers);
- making presentations to schools, community youth groups, faith-based organizations, and civic organizations; and
- holding infusion events to share Reality Check and statewide messaging, including booths at sporting events, fairs, dances, and arcades, and recruiting and handing out gear, information, and petitions.

Most (18 out of 26) of the planned Joint Partner strategies (activities whose financial, planning, and implementation responsibilities are shared equally among several funded partners) focused on the goal of decreasing the social acceptability of tobacco use, with 39 percent of them related to increasing antitobacco attitudes among youth and adults.

Of all paid media entries from January through May 2005, not including the approximately \$500,000 in additional funds that partners used to support the full ASP media campaign in Q2 2005, 29 percent related to the goal of decreasing the social acceptability of tobacco use. These paid media activities primarily included advertisements on television, radio, and in newspapers. Specifically, there were 9,084 television ads aired (at a cost of \$200,491); 1,414 radio ads aired (\$17,992); 53 newspaper ads printed (\$66,929); 500 mass mailings (i.e., 500 recipients) distributed (\$115.00); and 69 other media items disseminated, including transit postings (\$19,048) and billboards (\$74,950). In total, \$387,574 was spent on paid media activities focused specifically on Goal 2 from January through May 2005. This provides an incomplete picture of the extent of tobacco control advertising, because these estimates do not include public service announcements (PSAs) and other nonpaid forms of media.

In Chapter 2 of this report, we revisited our key findings from the 2004 IER to assess how NYTCP has responded to recommendations. Based on findings from the 2004 IER, we highlighted three recommendations:

- 1. Aggressively combat tobacco advertising and promotions.
- 2. Strive to reach 60 percent of New Yorkers with countermarketing efforts.
- 3. Address smokers' knowledge gaps, particularly around misperceptions of the benefits of low-tar or light cigarettes.

The activities noted above represent a strong response to these recommendations. The ASP initiative was launched, and the program has made significant strides to improve its countermarketing efforts.

As noted above, a significant percentage (43 percent) of partner activities under Goal 2 are aimed at "increasing antitobacco attitudes among youth and adults." Conversely, very few activities are planned around the objectives of reducing tobacco promotions occurring in bars, fraternities, and other "adult only" facilities and increasing the number of local laws, regulations, and voluntary policies that prohibit tobacco use in outdoor areas of businesses, other grounds, recreation areas, and in proximity to building entryways. These are new objectives, just recently added to the Strategic Plan in January 2005, so it is not unexpected that few activities are planned by the partners. However, because so few activities are planned around these objectives, it is unlikely that significant changes to these objectives will occur during the next year. The ASP initiative is a very promising approach to decreasing the social acceptability of tobacco use. But it also was just recently launched, so results from this 2005 IER will not provide a thorough evaluation of the impact of this initiative. Surveillance methods are in place to evaluate the initiative, and it is expected that the impact of ASP activities will begin to surface in subsequent data collection periods. What is clear now is that the strategies laid out under the ASP initiative will require a good deal of coordination between partners and with NYSDOH. As noted in Chapter 2, a key opportunity to coordinate a statewide media campaign designed to support the objectives of the ASP initiative with the launch of ASP was missed. Originally scheduled to air during the beginning of 2005 in coordination with a series of ASP activities, the campaign was delayed because of problems with departmental approvals and therefore did not correspond with the activities. Given the limited resources available to promote these activities, and the enormous amount of money spent by tobacco companies to promote and advertise their products, it is especially important that program components are coordinated.

### 4.3.3 How Have the News Media Covered Tobacco Issues in New York?

To monitor news media coverage of tobacco issues, we used ATS data on New Yorkers' characterization of tobacco coverage in the news and data from the Tobacco News Tracking system where we capture and code print news clippings. The latter allows us to monitor the volume of news media coverage of tobacco and whether this coverage is supportive of tobacco control efforts, is neutral, or is supportive of smoking/tobacco industry views. The volume and slant of news coverage of tobacco helps provide a context in which we can evaluate the program's efforts—specifically, these data allow us to assess the extent to which the program is working against tobacco coverage that favors smoking or with news coverage that supports tobacco control.

In addition, we are also able to monitor the extent to which Community Partners are able to have an impact on coverage by generating news stories with press releases and writing letters to the editor. Starting in February 2004 when the system was implemented, we began capturing mentions of Community Partners. This serves as one metric for assessing the impact of partners, but moving forward we will be able to link efforts reported in CAT to generate news coverage with actual news coverage—currently, there are not sufficient data to conduct this analysis.

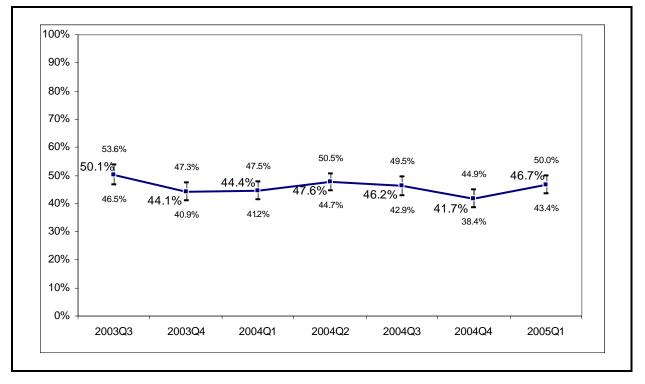
We begin by presenting data from the ATS on New Yorkers' characterization of tobaccorelated news media coverage. ATS respondents were asked the following question to characterize coverage of tobacco in the news:

 "I'd now like you to think of any <u>news</u> stories about smoking that you may have noticed on TV, radio, or in the newspapers, in the past 30 days. In your opinion, how was smoking portrayed in these news stories:

- Positively
- Negatively
- Neither positively or negatively
- Both negative and positive
- Do not recall any news stories"

Exhibit 4-70 presents the percentage of adults who responded that smoking was portrayed negatively in the news. This figure shows that somewhat less than half feel that smoking was portrayed negatively, and there has been no change in this measure over time.

# Exhibit 4-70. Percentage of Adults Who Believe Tobacco-Related News Stories are Negatively Slanted in the Media, ATS Q3 2003–Q1 2005



We investigated the slant of tobacco-related news coverage that occurred between February 2004 and January 2005 by exploring the potential reach of news stories as measured by article impressions. As illustrated in Exhibit 4-71, data from the Tobacco News Tracking system generally correspond with data from the ATS: the slant of tobacco-related news coverage has not changed markedly over time, with the possible exception of the first quarter of data. Articles that were neutral had the highest number of article impressions, followed by articles that were supportive of tobacco control.

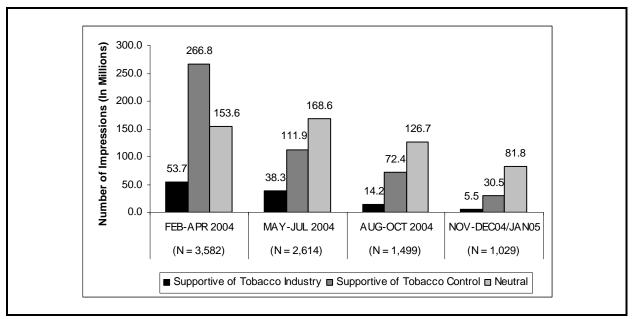
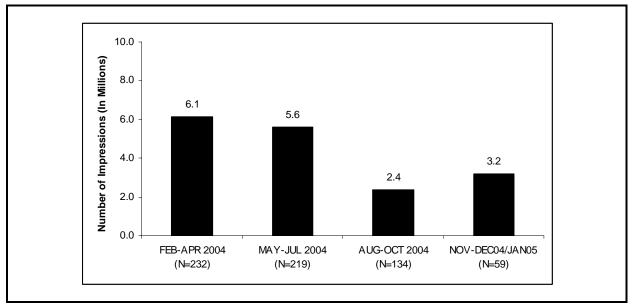


Exhibit 4-71. Slant Distribution among Tobacco-Related Articles

N = actual number of articles.

Exhibit 4-72 illustrates the number of articles that specifically mentioned a Community Partnership or Reality Check Youth Action Partner. The number of article impressions remained steady during the first two quarters of the year, then dramatically declined in the last two quarters in the year. Community Partner work plans did not call for significant press events during this time but rather information gathering and planning for events in 2005.





N = actual number of articles.

Next, we present general characteristics of the newspaper articles captured between February 2004 and January 2005. Exhibit 4-73 illustrates the changing nature of coverage over this time period. For example, coverage of SHS-issues dropped dramatically as the anniversaries of the smoke-free laws passed. The overall volume of tobacco-related news stories also dropped, largely because of the drop in coverage of SHS issues. Although the distribution of many news themes remained constant over this time period, relative coverage of "education, prevention, and cessation" and "youth access" topics increased.

	Ech Ann May July Ave Oct Ney Dec 2004 /						
	Feb-Apr 2004	May-July 2004	Aug-Oct 2004	Nov-Dec 2004/ Jan 2005			
	N = 3,582	N = 2,614	N =1,499	N = 1,029			
Type of Article							
News	73.6%	78.9%	75.7%	72.6%			
Editorial	10.8%	11.6%	14.4%	19.2%			
Letter to Editor	14.5%	8.1%	6.9%	5.8%			
Other <sup>a</sup>	1.1%	1.3%	3.0%	2.4%			
Theme							
Health Effects	12.4%	14.9%	19.2%	9.0%			
SHS and Smoke-Free Policies	42.9%	23.5%	19.1%	11.3%			
Consumption	1.5%	6.5%	3.0%	3.0%			
Tobacco Advertising, Sponsorship, and Promotion	5.5%	4.7%	4.3%	3.6%			
Economics	12.2%	10.2%	7.5%	11.4%			
Product and Regulation	0.3%	8.2%	8.3%	1.0%			
Youth Access	0.9%	5.0%	2.5%	12.5%			
Education, Prevention, and Cessation	13.3%	10.6%	12.5%	26.6%			
Legal Issues	5.8%	9.6%	14.4%	8.8%			
All other themes <sup>b</sup>	5.3%	6.9%	9.1%	12.8%			

#### Exhibit 4-73. Article Characteristics, News Media Tracking Data, February 2004-January 2005

<sup>a</sup>Includes reviews, cartoons, and other.

<sup>b</sup>Includes farming, addiction, unintended damage, tobacco industry, and other.

### 4.3.4 Have Tobacco Sponsorships Decreased Over Time?

Tobacco company sponsorships of sporting and cultural events have been shown to promote brand and company awareness and to create positive associations between brands and attractive images (Rosenberg and Siegel, 2001). It has been demonstrated that tobacco company sponsorship promotes sales and serves to "soften" public opinion toward the tobacco industry (Rosenberg and Siegel, 2001). Notably, in the only study to systematically look at tobacco industry sponsorships, researchers found that from 1995 to 1999, out of a total of 300 identified tobacco industry sponsorships (representing at least 2,733 events and activities), New York State had the most tobacco sponsorships (71) of any state.

It is difficult to assess the degree to which the level of tobacco sponsorships has changed, because there is no systematic approach yet in place to track tobacco sponsorships at the local level. Indeed, it has been suggested that there is a significant nationwide need for surveillance of tobacco company sponsorship at the community level (Rosenberg and Siegel, 2001). In response to this need, a function will soon be added to CAT that will provide an opportunity to record tobacco industry advertising, sponsorships, and promotions as Community Partners become aware of them. This system will be focused on the following:

- Commercial sponsorship tracking
- Corporate sponsorship/giving tracking
- Promotional event tracking
- Policy tracking

As part of this added function of CAT, partners will be able to enter data on events, sponsorships, and information that they find about tobacco industry advertising, sponsorship, and promotion. CAT also includes a section in which partners can share success stories about events, venues, or organizations that have verbal or written policies prohibiting tobacco industry commercial sponsorship, corporate giving, or promotion.

In the meantime, it is possible to look at reported awareness of tobacco sponsorships indirectly, using data from the ATS. ATS respondents were asked if they had noticed any tobacco advertising at sporting and cultural events. Although an affirmative response does not necessarily indicate tobacco sponsorship (respondents could have seen tobacco advertising unaffiliated with the event, for example), it provides a general measure of exposure to tobacco promotion at events commonly sponsored by tobacco companies.

As illustrated in Exhibits 4-74 and 4-75, there has been a modest but statistically significant decline in the percentages of adults who have noticed tobacco advertising at sporting (p < 0.05) and cultural (p < 0.003) events. Keeping in mind that these questions are addressing tobacco advertising at events, rather than sponsorships per se, these data should not be interpreted as providing an estimate of tobacco sponsorship prevalence. Also, although 11 percent of planned partner activities are aimed at reducing tobacco sponsorships at events, the ASP initiative did not begin until January 2005. These declines in reported awareness therefore more likely represent declines related to other factors.

Exhibit 4-74. Percentage of Adults Who Noticed Tobacco Advertising at Sporting Events, ATS Q3 2003–Q1 2005

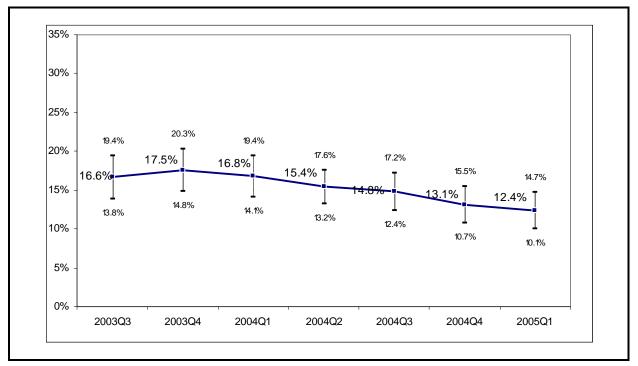
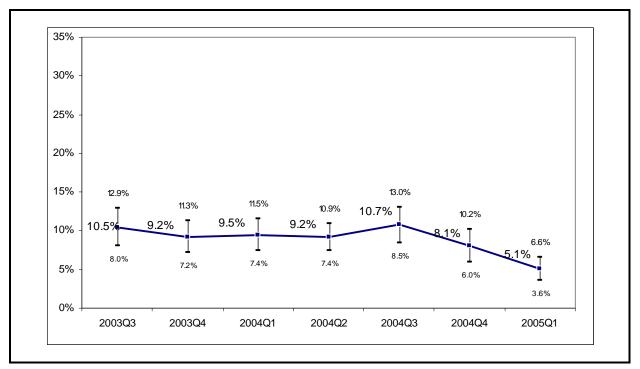


Exhibit 4-75. Percentage of Adults Who Noticed Tobacco Advertising at Cultural Events, ATS Q3 2003–Q1 2005



### 4.3.5 What Is the Level of Point-of-Purchase Tobacco Advertising and Promotions Prior to the Advertising, Sponsorship, and Promotion Initiative?

To monitor tobacco advertising and promotions in the retail environment, RTI and NYTCP developed a community-based surveillance system that assesses cigarette and other tobacco advertising and promotions in New York State licensed tobacco retailers. This surveillance system, known as RATS, provides data to monitor statewide and regional progress toward Goal 2 (decreasing social acceptability of tobacco use) and Goal 4 (preventing initiation of tobacco use among youth and young adults). Baseline data from this system provide a snapshot of the retail environment.

RATS captures information on cigarette advertising on the exterior and interior of retail outlets; cigarette prices, promotions, and in-store advertising for three brands of cigarettes (Marlboro, Newport, and Doral) and for the cheapest brand outside of Marlboro, Newport, and Doral; compliance with required state age of sale signage; and compliance with MSA restrictions on advertising. Data were collected for regular (king size) full-flavor packs and cartons. In this section, we focus on data related to cigarette advertising in the retail environment and cigarette promotions. Baseline data were collected during the last quarter of 2004 by Retail Diagnostics Inc. (RDI), an independent research firm. Baseline data included information on 2,266 New York retailers in November 2004.

## Special Prices and Promotions

In 2002, the tobacco industry spent \$7.87 billion—63.2 percent of its budget for advertising and promotional expenditures such as price discounts to cigarette retailers or wholesalers— to reduce the price of cigarettes to consumers (FTC, 2004). RATS baseline data show that in November 2004, 81 percent of all licensed New York tobacco retailers provided special prices or discount offers for pack sales for the three brands that were measured: Marlboros, Newports, or Dorals (Exhibit 4-76). This exhibit also indicates that 12 percent of retailers had some type of volume discount, such as buy two packs, get one free. Retail outlets sell cigarettes using a promotional tactic, such as mail-in rebates, coupons, volume discounts, or gifts with purchase; promotions exclude cigarettes advertised with special or discounted prices. On average, 17 percent of statewide retail outlets offered some type of purchase promotion for cigarette packs.

## Tobacco Advertising in the Retail Environment

Baseline data from RATS also included information on the prevalence of tobacco retail advertising on the exteriors and interiors of retail outlets. We present information on both exterior and interior advertising. Exterior advertising includes cigarette signage, portable or freestanding displays, and functional items on the retailer's building and property (e.g., gas pumps, fences, parking lot). Our protocol for measuring exterior and interior advertising included the following:

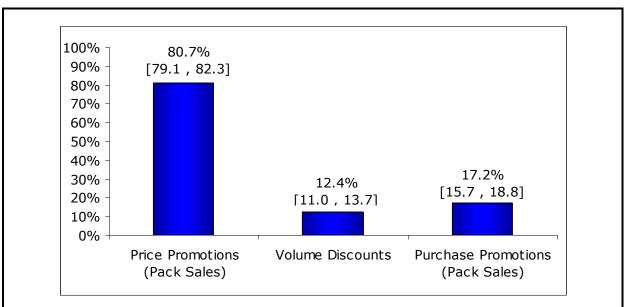


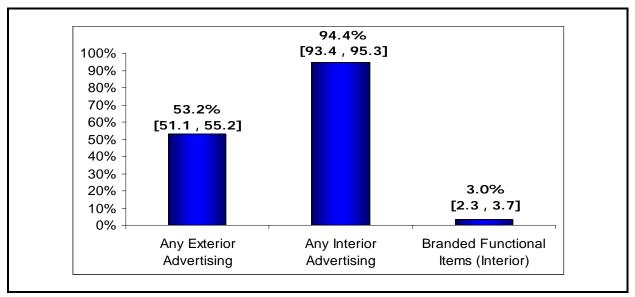
Exhibit 4-76. Percentage of New York Tobacco Retailers with Price, Volume, and Purchase Promotions, November 2004

- posters, signs, decals, banners, etc;
- displays (e.g., portable units such as cardboard, plastic, or Plexiglas)—counted as an advertising unit if the display contained as least one advertising impression; and
- branded functional items (e.g., clocks, trashcans, open/closed signs).

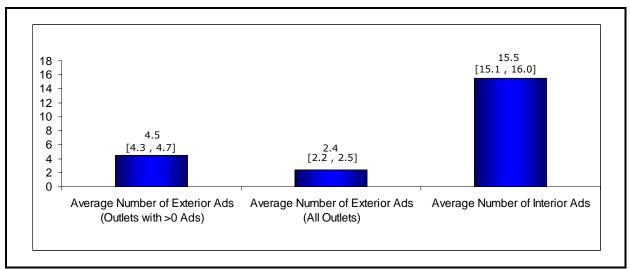
Nearly all (94 percent) tobacco retailers have interior tobacco advertising, and more than half of tobacco retailers (53 percent) have some form of exterior advertising (Exhibit 4-77). Functional items refer to industry-produced promotional items that advertise a brand and that also serve a purpose. Functional items are located throughout a store and include clocks, benches, doormats, trashcans, enter/exit door signs, open/closed window signs, push/pull door signs, coin trays, checkout divider bars, and shopping baskets. Relatively few tobacco retailers (3 percent) have branded functional items on the store interior. On average, tobacco retailers displayed 2.4 exterior advertisements (4.5 among those that had at least 1) and 15.5 interior advertisements (Exhibit 4-78).

Since the baseline data collection, Community Partners have been collecting comparable data on a rolling basis from tobacco retailers. To validate their data collection efforts, RDI is collecting data from a random subset of the outlets visited by the partners. Over time, this will provide trend data with which we can assess the success of the component of the ASP initiative that focuses on the retail environment.

#### Exhibit 4-77. Percentage of Tobacco Retailers with Exterior Cigarette Advertising, Interior Cigarette Advertising, and Branded Functional Items, November 2004



## Exhibit 4-78. Average Number of Exterior and Interior Advertisements, November 2004



## 4.3.6 Has Awareness/Receipt of Pro-Tobacco Advertising and Promotions Declined Over Time?

Tobacco advertising and promotions are associated with youth smoking and with changes in attitudes known to be precursors to smoking. As noted earlier, exposure to tobacco advertising, including point-of-purchase advertising, is strongly associated with adolescent smoking (Henriksen et al., 2004). To assess trends in awareness and/or receipt of protobacco advertising and promotions, we analyzed data from the ATS and YTS.

The Federal Trade Commission (FTC), in its most recent report on cigarette sales, advertising, and promotion (for 2002) (FTC, 2004), found that while advertising and promotional expenditures nationwide rose to the highest amount ever reported (\$12.47 billion, an 11 percent increase), advertising expenditures for newspaper, magazine, and outdoor advertising decreased significantly. This corresponds with a significant increase over past years in promotional allowances—price discounts, promotional allowances paid to retailers and wholesalers, and other promotional allowances made up 77.5 percent (\$9.66 billion) of all 2002 spending.

The measures below provide baseline trends against which we can assess the impact of NYTCP's ASP initiative as it develops. Because it began in January 2005, we do not yet expect it to have had an effect on these measures.

## Awareness of Cigarette Advertising in Convenience Stores or Gas Stations

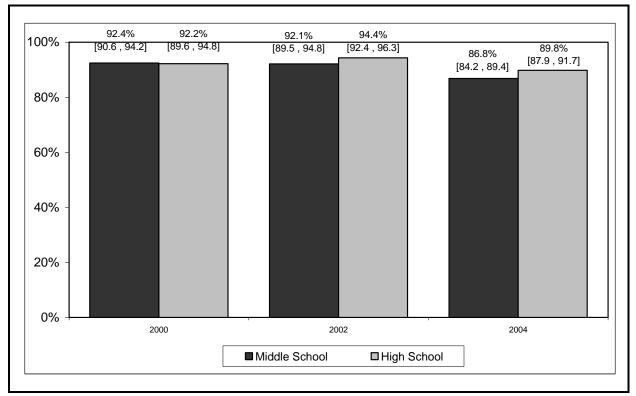
Because reducing advertising in convenience stores and gas stations is a central aim of the ASP initiative, we asked ATS respondents whether they saw cigarette advertising at a convenience store or gas station in the past 30 days. In Q1 2005, 82–83 percent of adults noticed cigarette advertising in these locations. This percentage corresponds to the high percentage (94 percent) of retail advertising observed in the baseline collection on the instore observational study (RATS). In future years, we would expect to see awareness of cigarette advertising decrease correspondingly with decreases in reported retailer advertising from RATS.

Similarly, a very high percentage of adolescents reported seeing tobacco advertising in grocery stores and gas stations (Exhibit 4-79). Although there has been a modest but significant decline in awareness since 2000, 86.8 percent of middle school students and 89.8 percent of high school students still reported seeing advertising in grocery stores or gas stations in 2004.

## **Overall Awareness of Tobacco Advertising**

To assess overall exposure to tobacco advertising among adults, we developed an index comprised of several ATS questions. The questions used to create this index asked whether, in the past 30 days, a respondent noticed cigarette or tobacco products being advertised in the following locations:





- On posters or billboards
- In newspapers or magazines
- In shop windows or inside shops where tobacco is sold
- Over the Internet
- In bars

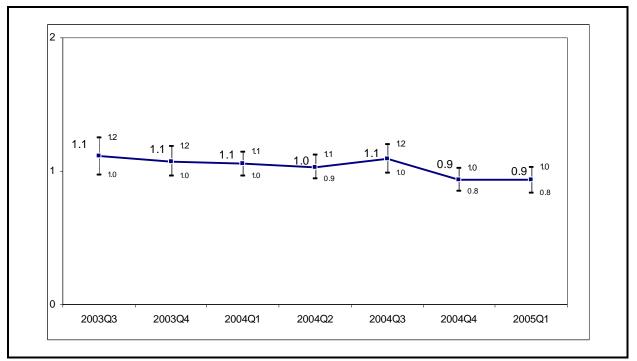
For each of these questions, ATS respondents chose from the following options (with the scale value used in the index in parentheses):

- Two-three times per day (2.5)
- Every day (1)
- Once per week (1/7)
- Less than once per week (1/14)
- Never or not applicable (0)

The index for each respondent was then calculated as the sum of responses to each of these questions, with the index value for each respondent ranging from 0 and 12.5. We assigned the weighted mean of all responses to respondents who had a missing value for any question. This approach does not affect the overall reported mean, but it does increase the number of observations included in the analysis (otherwise, if a respondent fails to respond to a single question, the respondent would be dropped from the reported mean). The average index represents respondents' daily exposure to tobacco advertising in the past month.

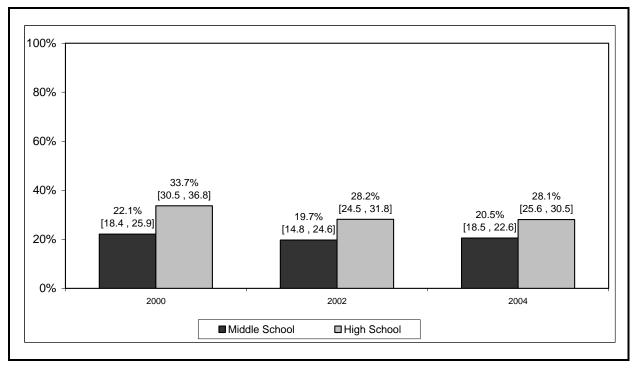
Exhibit 4-80 indicates that adults report seeing an average of one tobacco advertisement per day. This exhibit illustrates a modest but statistically significant (p < 0.01) downward trend in awareness of tobacco advertising, consistent with the tobacco industry's shift in recent years toward greater promotional, rather than advertising, spending. For example, expenditures on magazine advertising dropped from \$377 million nationwide in 1999 to \$107 million in 2002, a 72 percent decline. In addition, Philip Morris reports that its magazine advertising declined by 94 percent from 1998 to 2003 (http://www.philipmorrisusa.com/en/responsible\_ marketing/marketing\_practices.asp#advertising, accessed July, 2005). If this trend continued through 2004 (data not yet available), this would help explain this downward shift. Moving forward with additional data on ASP activities from the CAT system, we will be able to tie the program's activities to this index of tobacco advertising awareness as one measure of the program's success in reducing tobacco advertising in New York.

Exhibit 4-80. Average Index of Awareness of Tobacco Advertising or Promotions Among Adults, ATS Q3 2003–Q1 2005



# Receptivity to Wearing Tobacco Branded Attire Among Youth

Ownership of promotional materials has been longitudinally linked to a significant increase in the likelihood of becoming an established smoker among adolescent nonsmokers and early experimenters (Biener and Siegel, 2000). Although tobacco branded materials were banned by the 1998 MSA, it is useful to measure youth's receptivity to branded gear as a measure of their openness to tobacco marketing efforts. Data from the YTS show that receptivity to branded material has not significantly decreased among middle school students but has modestly decreased among high school students (p < 0.01) (Exhibit 4-81).



## Exhibit 4-81. Percentage of Middle and High School Students Who Would Wear Tobacco Branded Attire, YTS 2000–2004

# Tobacco Advertising on the Internet

Since 2000, there has been a significant increase in the percentage of middle school and high school students who report seeing tobacco advertising on the Internet. Although this trend appears to have stabilized since 2002, the percentage of youth reporting exposure to this form of advertising remains high (Exhibit 4-82). Approximately 72 percent of high school students and 66 percent of middle school students report seeing tobacco advertising on the Internet in 2004. Clearly, this form of advertising warrants close monitoring in the future and may signal a possible focus for future policy change efforts.

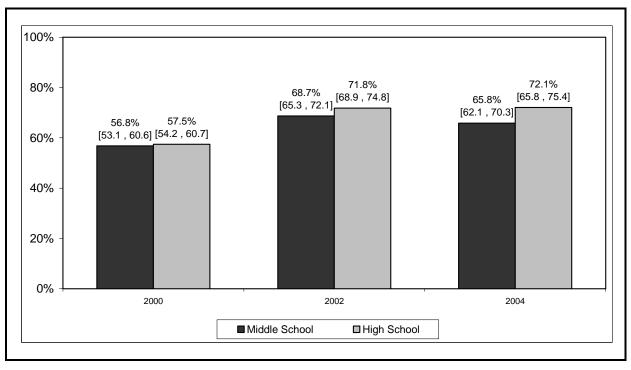
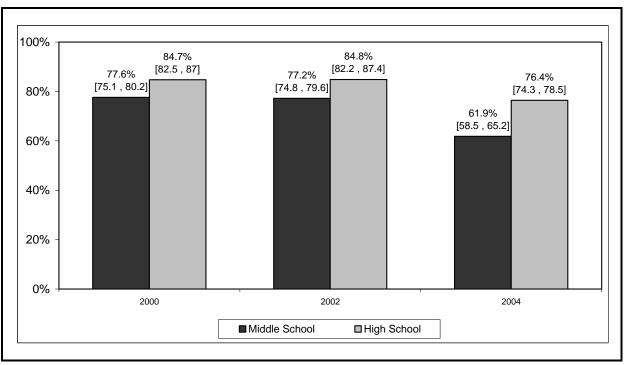


Exhibit 4-82. Percentage of Middle and High School Students Who Have Seen Tobacco Advertising on the Internet, YTS 2000–2004

# Youth Awareness of Tobacco Advertising in Newspapers and Magazines

Reducing the presence of tobacco advertising in newspapers and magazines has been a key focus for Reality Check Youth Action Partners. Work on this objective has been notably successful. Reality Check Youth Action Partners conducted a statewide survey of middle and high school libraries in New York to assess the number of magazines carried in school libraries that include tobacco advertising. They found that more than 70 percent of the school libraries had magazines with extensive tobacco advertising and that some of these magazines are among the most popular among students. The Reality Check Youth Action Partners strongly advocated for these magazines to remove tobacco advertising, and, in March 2005, the New York State Attorney General wrote to tobacco companies urging them to remove tobacco advertising from school copies of the magazines. Subsequently, the National Association of Attorneys General reached an agreement with two national magazine publishers to eliminate tobacco advertising from school library editions nationwide. Although a number of factors led to this agreement, it is clear that the efforts of the Reality Check Youth Action Partners played a pivotal role in removing this significant form of tobacco advertising from schools. Although this programmatic success would not be represented in the data reported in this report, it is likely that this change in magazine publishing will have a direct impact on exposure to magazine tobacco advertising in school libraries, as the magazines involved have a significant youth readership.

In Exhibit 4-83, we chart data from three waves of the YTS, beginning in 2000. This exhibit shows a significant decline in estimated exposure to advertising beginning in 2002. In 2004, 61.9 percent of middle school students and 76.4 percent of high school students reported seeing tobacco advertising in newspapers or magazines. Although still a high percentage, this represents a significant drop from 2002, when 77 percent of middle school and 85 percent of high school students reported exposure. As noted above, there has been a downward trend in expenditures in cigarette advertising in magazines nationwide.



#### Exhibit 4-83. Percentage of Middle and High School Students Who Have Seen Tobacco Advertising in Newspapers or Magazines, YTS 2000–2004

# 4.3.7 Have Awareness of and Receptivity to Tobacco Control Messages Increased Over Time?

# Awareness of Tobacco Control Media

As noted in Chapter 2, NYTCP has made significant progress in addressing earlier concerns that the media campaign had been ineffective and failed to arouse strong emotional responses among target audiences. Since the 2004 IER, NYTCP has significantly increased the use of emotionally-laden messages with intense images in its media campaign. Ads such as those from the Pam Laffin series featured strong emotional appeals that highlighted the long-term family consequences of smoking, while partner-run ads such as those from the "Every Cigarette Does You Damage" series featured graphic images depicting the physical consequences of smoking.

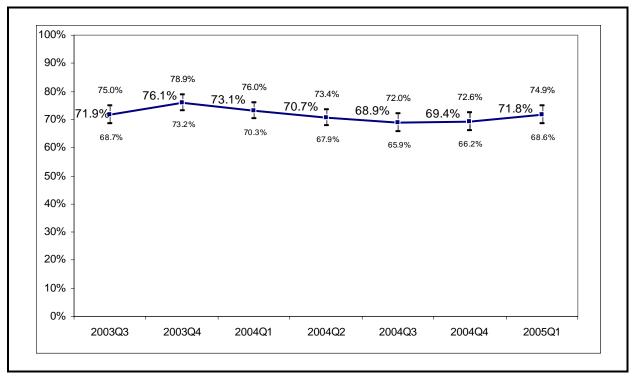
Given the program's increased efforts to use stronger emotional content and more intense imagery in its messages, we expect to observe overall higher statewide awareness of specific antismoking advertisements. In this section, we report awareness of various tobacco control messages among adults and youth in New York. We use data from the ATS to analyze trends in general awareness of tobacco control media among adults, focusing on awareness of specific message themes and media channels and awareness of specific ads.

## Adults' Awareness of Tobacco Control Media Messages

Every quarter, we consult with NYTCP staff to understand what tobacco control television ads will be airing in the upcoming quarter so that questions on awareness and reactions to these ads can be added to the ATS. In addition, using data from the CAT system, we gather data on Community Partner-run television ads to ask comparable questions of ATS respondents in the partner's media market. The ATS includes questions that measure New Yorkers' awareness of both general and specific media messages. General awareness questions ask adults to indicate whether they have seen or heard messages in the past 30 days on a range of topics. Awareness of specific advertisements sponsored by NYTCP or one of its funded partners is assessed using a two-part confirmed recall question. Respondents are first given a brief description of the advertisement and, if they indicate they have seen it, are then asked to provide additional description of what happens in the ad. Those who successfully describe the ad in further detail are considered to have confirmed awareness of the ad. Adults who indicate that they have seen specific advertisements are further asked whether the ad "said something important to them" and whether they talked to anyone about not smoking after viewing the ad.

We begin by presenting trends in overall awareness of tobacco control advertisements on television and radio. We then present data on general awareness of advertising that focuses on various antismoking topics that are central to the objectives of program goal areas, including ads that mention the New York State Smokers' Quitline, ads about the dangers of SHS, and ads that highlight the long-term health and family consequences of smoking. Lastly, we present data on awareness of and reactions to specific tobacco control ads that aired statewide and locally in New York between Q3 2003 and Q1 2005.

Exhibit 4-84 presents trends in overall awareness of tobacco control advertisements on television in the 30 days prior to the survey among all adults surveyed in the ATS. General awareness of tobacco control messages on television has remained stable.



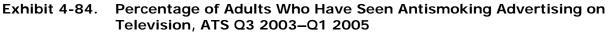


Exhibit 4-85 presents trends in general awareness, among all adults, of ads that highlight deaths of family members due to smoking-related illnesses. These data show that there has been a marginally significant increase (p < 0.06) in awareness of messages that emphasize family consequences and a marked increase beginning in Q3 2004. Awareness of these types of ads increased from 42.3 percent in Q3 2004 to 54.7 percent in Q1 2005, a statistically significant and sizeable difference.

Increases in awareness of ads that emphasize family member deaths from smoking-related illnesses were even more pronounced among current smokers in New York. Exhibit 4-86 shows awareness of these messages increased from 41.4 percent in Q3 2004 to 58.5 percent in Q1 2005, a statistically significant increase. This figure also demonstrates a drop in awareness after Q2 2004. This is reflective of the period from June through November 2004 when there was an absence of statewide televised advertising. At the same time, Community Partner contracts were being re-procured, and, because contracts were not fully executed until late in Q4 2004, Community Partners also did not run significant media.

To test the influence of NYTCP-sponsored media on awareness of family member deaths, we estimated a regression to explain changes in awareness of this topic over time as a function of NYTCP-sponsored SHS and cessation messages. This regression shows that adults who



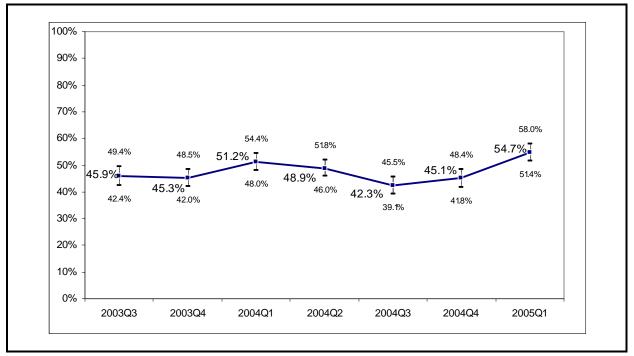
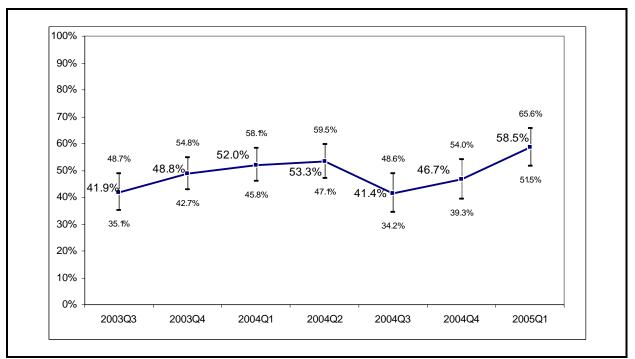


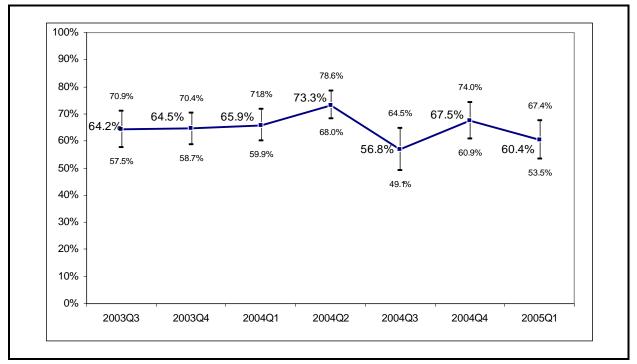
Exhibit 4-86. Percentage of Adult Smokers Who Have Seen Advertising About Family Members Losing a Loved One Due to Smoking-Related Illnesses, ATS Q3 2003–Q1 2005



report awareness of SHS messages had an increased odds (OR = 1.3, p < 0.008) of being aware of messages about the loss of family members due to smoking. The relation to cessation messages was stronger (OR = 2.5, p < 0.001). Among smokers, the effect of SHS messages was not as large and only marginally statistically significant (OR = 1.4, p < 0.07). There was a strong relationship between awareness of cessation messages and awareness of messages about the loss of family members due to smoking (OR = 2.0, p < 0.002). This is not surprising because the Pam Laffin series of ads, which feature a young woman who died prematurely due to smoking and left two children orphaned, aired during Q1 2005 (when awareness increased).

Exhibits 4-87 and 4-88 show trends in smokers' awareness of ads that highlight the dangers of smoking in the presence of children and ads that mention a Quitline. Exhibit 4-87 shows that between Q2 and Q3 2004, general awareness of messages about the dangers of children's exposure to SHS declined from 73.3 to 56.8 percent among adult current smokers. Awareness of ads that mention a Quitline dropped from 59.5 to 46.8 percent among current smokers between Q2 and Q3 2004 (Exhibit 4-88). Similar trends were observed for the general population of adults (data not shown) but were less pronounced compared to adult current smokers.





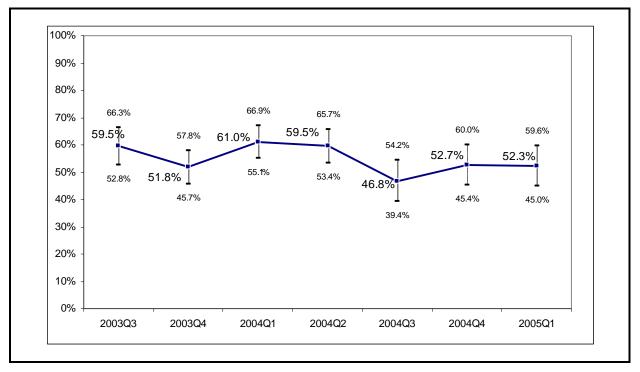


Exhibit 4-88. Percentage of Adult Smokers Who Have Noticed Advertisements About Calling a Quitline, ATS Q3 2003–Q1 2005

Regression analyses indicate that those who recalled NYTCP-sponsored messages about SHS had twice the odds of being aware of messages about the dangers of SHS for children (OR = 2.1, p < 0.001). The cessation messages, however, do not increase awareness of the dangers of SHS for children as one might expect. We find that recall of both SHS and cessation ads was associated with increased awareness of ads that mention a Quitline—smokers who recall NYTCP-sponsored SHS messages had an increased odds of being aware of messages that mention a Quitline (OR = 2.1, p < 0.001) that was somewhat larger than that for cessation ads (OR = 1.5, p < 0.05).

Although the results above are somewhat counterintuitive in terms of how NYTCP-sponsored media messages about SHS and cessation increase awareness of specific topics, they do show a statistically significant link between recall of media and awareness of tobacco control messages. These findings are important as drops in awareness when the media is off the air can decrease the impact on downstream indicators of program impact, such as changes in knowledge, attitudes, and behaviors. It often takes sustained exposure to media messages to have an impact on these outcomes. We examine the correlation between awareness of media and knowledge and attitudes below.

# **Confirmed Awareness and Reactions to Specific Ads**

Exhibit 4-89 lists each specific SHS- and cessation-focused advertisement tracked in the ATS, by quarter. This list shows that a higher percentage of cessation-focused advertising used high-emotion messages over time, compared to ads that highlighted the dangers of SHS. Below, we present data on awareness of and reactions to these advertisements across all available quarters of ATS data from Q3 2003 through Q1 2005.

SHS Adve	rtisements		Cessation Advertisements			
Title	ATS Quarter	Emotion/ Impact	Title	ATS Quarter	Emotion/ Impact	
Bartender	Q3 2003	Low	Quitting Takes Practice	Q2 2004	Low	
Outside the Bar	Q3 2003	Low	Cigarette Pack	Q2 2004	High	
Waitress	Q3 2003	Low	Quit Yet	Q2 2004	Low	
Baby Seat	Q2 2004	High	Judy Dying	Q3 2004	High	
Sign of the Times	Q2 2004	Low	Quitting is Hard	Q3 2004 Q4 2004	Low	
Little Girl	Q2 2004	Low	I Need You	Q1 2005	High	
Front Porch	Q2 2004	Low	Pam Laffin (Abuse)	Q1 2005	High	
Never Smoke	Q2 2004	Low	Pam Laffin (Krystell)	Q1 2005	High	
Clean Indoor Air Testimonials for Business	Q3 2004	Low	Pam Laffin (Last Goodbye)	Q1 2005	High	
CIAA Testimonials in Mall	Q3 2004	Low	Pam Laffin's Kids	Q1 2005	High	
Paul Decker	Q3 2004	High	Bob Quits Q4 200 Q1 200		Low	
Smoke Free New York	Q3 2004	Low	Every Cigarette Does Q1 2005 You Damage		High	
Heather Crowe	Q3 2004 Q4 2004	High				

Exhibit 4-89.	Statewide and Local SHS- and Cessation-Focused Advertising in
	New York, Q3 2003–Q1 2005

Exhibit 4-90 shows overall awareness of and reactions to NYTCP-sponsored advertisements, by quarter beginning in Q3 2003. As expected, confirmed awareness of and reactions to media declined significantly during Q3 and Q4 2004, because of the absence of statewide advertising. However, the percentage of New York adults who recalled seeing at least one specific advertisement rebounded dramatically to 41.2 percent in Q1 2005, a significant increase from Q2 2004 when confirmed awareness was estimated at 32.7 percent. This increase is likely because of the Pam Laffin series, which was aired both statewide by NTYCP

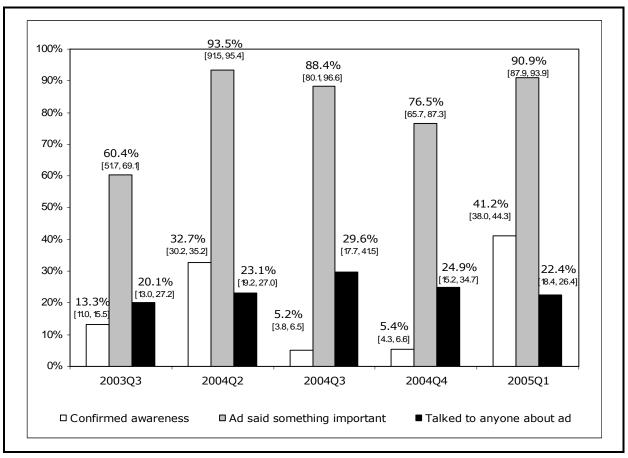
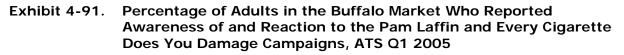
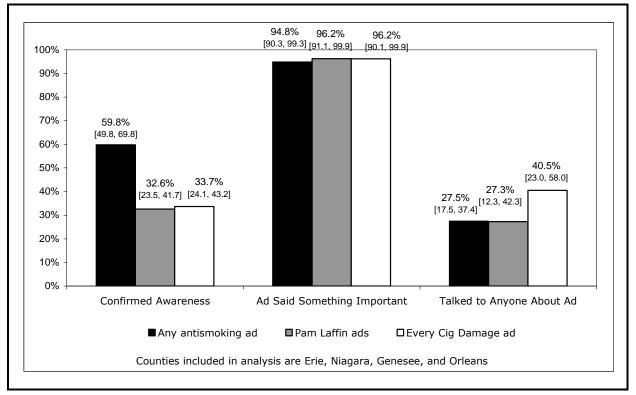


Exhibit 4-90. Percentage of Adults Who Reported Confirmed Awareness of and Reaction to NYTCP Media Campaign Advertisements (Statewide and Local), ATS Q3 2003–Q1 2005

and locally by NYTCP partners. The percentage of adults who indicated that the ads they saw said something important to them were similarly high in the first quarter of 2005 at 90.9 percent. Although overall awareness of NYTCP-sponsored advertising remained below the recommended 60 percent that was set forth in the 2004 IER, these data provide evidence that NYTCP has made noticeable progress toward achieving the recommended levels of awareness.

Although the recommended levels of confirmed awareness have not yet been reached statewide, they *have* been reached in other areas of the state where the Pam Laffin series aired in conjunction with other partner-run media campaigns. For example, the Erie-Niagara Tobacco Free Coalition and Tobacco Cessation Center of Western New York sponsored the "Every Cigarette Does You Damage" series of ads within the Buffalo area of New York during Q1 2005. As noted elsewhere, this campaign uses graphic images that highlight the harmful physical effects of smoking. Exhibit 4-91 presents data on confirmed awareness of and





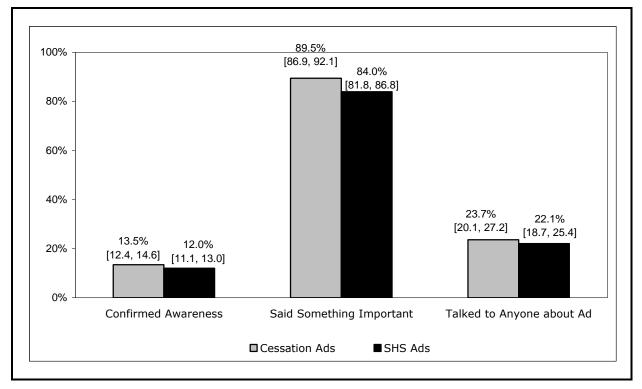
reactions to all NYTCP-sponsored ads, the Pam Laffin series, and the "Every Cigarette Does You Damage" campaign in Erie, Niagara, Genesee, and Orleans Counties, representing the primary counties that constitute the Buffalo media market. These data show that 60 percent of adults within these counties recalled seeing at least one tobacco control advertisement in Q1 2005. This high rate of awareness is primarily due to the combined market penetration of the Pam Laffin and "Every Cigarette Does You Damage" campaigns, which had 33 and 35 percent confirmed awareness, respectively. Furthermore, reactions to these campaigns were very favorable, with more than 95 percent of adults who saw the ads indicating that the ads said something important to them.

Although high rates of awareness were achieved in the Buffalo media market, it should be noted that the cost of television advertising is low, relative to the size of the population in its catchment area. Further, given the population size in its catchment area, Buffalo market partners receive considerably more media funding compared to partners that cover less densely-populated catchment areas. Our findings on awareness within the Buffalo market thus reflect the reality that greater media resources generally translate into higher rates of awareness. Partners in markets that are either very expensive due to heavier population density (e.g., New York City) or markets that receive less media dollars due to a *lack* of population density may therefore not have the resources necessary to reach the recommended levels of awareness. Nevertheless, these data provide an example of what is possible when effective combinations of message strategies are used in combination with ample amounts of media market penetration.

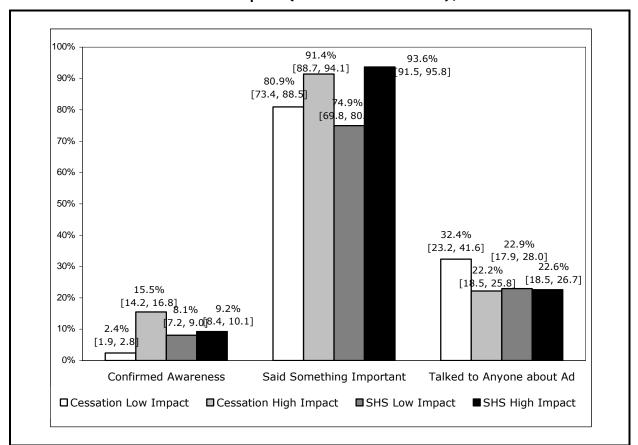
# Awareness of and Reactions to SHS- and Cessation-Focused Ads

As noted above, NYTCP aired two basic types of advertisements between Q3 2003 and Q1 2005: (1) ads that highlight the dangers of SHS and (2) ads that promote smoking cessation. Exhibit 4-92 shows overall confirmed awareness of and reactions to SHS and cessation ads separately. Although confirmed awareness peaked in Q1 2005 when all ads were focused on cessation, the average rate of awareness for both SHS (12 percent) and cessation ads (13.5 percent) is similar when averaged across all available waves of ATS data (which include off-air periods of inactivity). These data also show that adults who saw ads promoting smoking cessation were more likely to report that the ad "said something important" to them compared with those who saw SHS ads, but the difference (90 percent versus 84 percent) is not very large. This difference is consistent with the fact that a higher percentage of cessation-focused ads used emotional content and intense imagery.

#### Exhibit 4-92. Percentage of Adults Who Reported Confirmed Awareness of and Reaction to NYTCP Cessation and SHS Advertisements (Statewide and Local), ATS Q3 2003–Q1 2005



To further elucidate the importance of message content, we summarized overall confirmed awareness of and reactions to SHS and cessation ads separately by high emotion/impact and low emotion/impact. Exhibit 4-93 shows that both SHS and cessation ads with greater emotional content were significantly more likely to say something important to target audiences.



#### Exhibit 4-93. Percentage of Adults Who Reported Confirmed Awareness of and Reaction to NYTCP Cessation and SHS Advertisements by High and Low Emotion/Impact (Statewide and Local), ATS Q3 2003–Q1 2005

In summary, the findings discussed above demonstrate that NYTCP has made noticeable progress toward addressing critiques of mass media efforts from the 2004 IER, including achieving the recommended levels of campaign awareness by airing "high emotion" ads. We also found that the Community Partnerships in the Buffalo area that aired the "Every Cigarette Does You Damage" campaign to complement statewide efforts were able to achieve the recommended level of 60 percent confirmed awareness of specific advertisements. These findings also underscore the role of adequate funding for media campaigns and commitment to run effective ads. Because of its population size, Community Partners in the Buffalo area receive considerably greater resources for funding media campaigns compared to partners

within less densely-populated communities. Therefore, achieving the recommended levels of awareness requires not just the use of effective message content (i.e., high emotion advertisements) but rather a combination of the appropriate message content and sufficient levels of resources for funding media campaigns.

### Awareness of and Participation in the Reality Check Youth Action Program

The goal of the Reality Check Youth Action Partners is to denormalize and deglamorize tobacco use and contribute to shifting community norms about tobacco by changing social policies and countering tobacco company promotion and advertising. Related to decreasing the social acceptability of tobacco use, Reality Check has engaged in several multiyear initiatives to expose and eliminate the promotion of tobacco and tobacco use in movies, magazines, schools, and on the Internet.

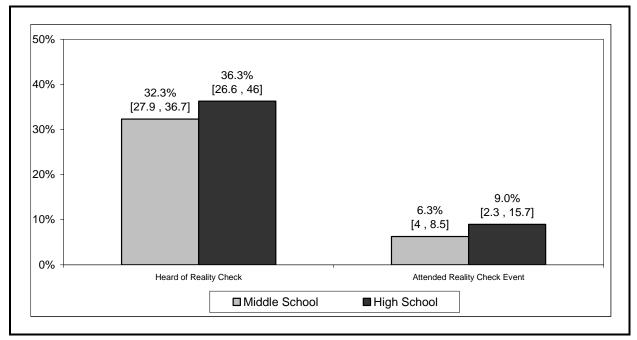
Youth involved with the Reality Check program have participated in such activities as organizing mass phone calls and visits to video rental stores to request smoke free movies; conducting letter writing campaigns to petition members of the Motion Picture Association of America (MPAA) to eliminate smoking in movies rated G, PG, and PG-13; and organizing movie nights where youth congregate to view teen-oriented films and discuss instances of tobacco use in those films. Studies have shown that normative perceptions of tobacco use are strongly correlated with smoking initiation. Following the social norms approach outlined in the NYTCP Strategic Plan, the program seeks to reduce misperceptions about the prevalence and acceptability of tobacco use, and in turn reduce smoking initiation among youth and young adults and smoking prevalence among adults.

Although the 2004 YTS does not contain questions on overall participation in community events, which would have allowed us to update the trends presented in the 2004 IER, the 2004 YTS does contain detailed questions about youth awareness of and participation in Reality Check. Exhibits 4-94 and 4-95 show the overall percentage of middle and high school students who were aware of Reality Check; the percentage who attended any Reality Check events in the past 12 months; and, of those who attended Reality Check events, the percentage who participated in specific types of Reality Check activities. These data indicate that 32.3 and 36.3 percent of middle school and high school students, respectively, are aware of Reality Check is not a specific objective for the program.

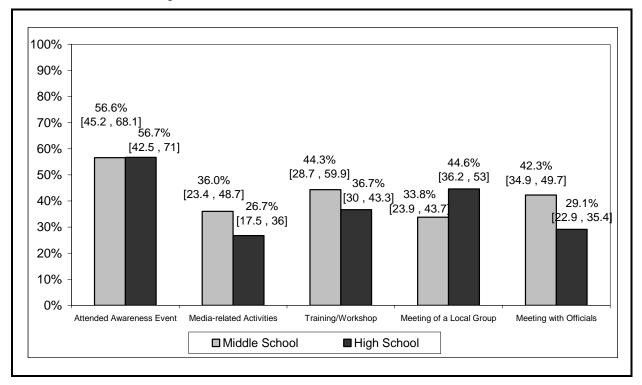
# 4.3.8 Has Knowledge about the Health Risks of Smoking and Antitobacco Attitudes and Beliefs Increased Over Time?

Through a variety of community education initiatives, including paid and earned media, NYTCP seeks to shift knowledge, attitudes, and beliefs about tobacco in an effort to change behavior and achieve program objectives. In this section, we report trends in tobaccorelated attitudes from the ATS and YTS.

# Exhibit 4-94. Percentage of Middle and High School Students Who Were Aware of Reality Check and Participated in Reality Check Events, YTS 2004



#### Exhibit 4-95. Percentage of Middle and High School Students Who Participated in Specific Reality Check Activities, Among Those Who Attended Any Reality Check Event, YTS 2004



Ideally, knowledge, attitude, and belief questions should be designed to reflect programmatic activities or sets of activities and themes in program-sponsored media messages. However, this is not necessarily practical or feasible given NYTCP's diverse and evolving activities over time. As a result, although the specific knowledge, attitude, and belief questions in the ATS and YTS are generally relevant to the program, they do not squarely align with all of the various messages the program disseminates and therefore do not capture all of the program's potential impact.

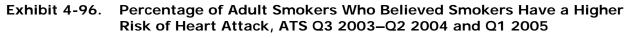
The ATS and YTS include several domains of knowledge, attitude, and belief questions knowledge of the health risks of smoking; perceptions of the risks/benefits of low-tar cigarettes and nicotine patches; and attitudes about smoking in the movies.

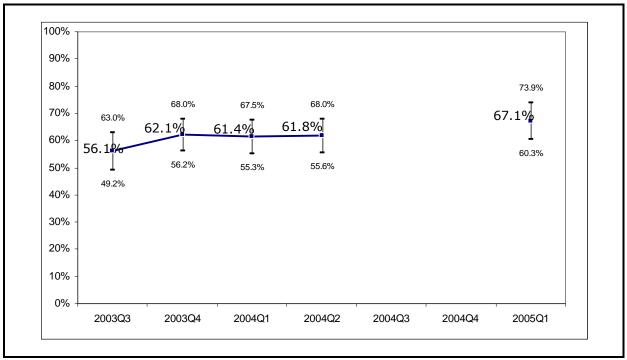
In Exhibits 4-96 through 4-98, we illustrate the trends in perceived risks of heart attack, lung cancer, and other cancers as a result of smoking among adult smokers using an index of three items:

- Do you think your risk of having a heart attack is higher, lower, or about the same as other people who are your age and don't smoke?
- Do you think your risk of lung cancer is higher, lower, or about the same as other people who are your age and don't smoke?
- Do you think your risk of other cancers besides lung cancer is higher, lower, or about the same as other people who are your age and don't smoke?

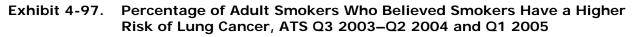
These exhibits indicate that only the perception that smoking is a risk for heart disease has increased over time. We found that recall of NYTCP-sponsored cessation messages had a significant effect on the odds that a smoker recognized the health risk of smoking on heart health (OR = 1.6, p < 0.05) and lung cancer (OR = 1.7, p < 0.05). Recall of NYTCP-sponsored media messages was not correlated with knowledge of the health risks of smoking on other cancers. There was no correlation between knowledge of any of these health risks and recall of SHS messages.

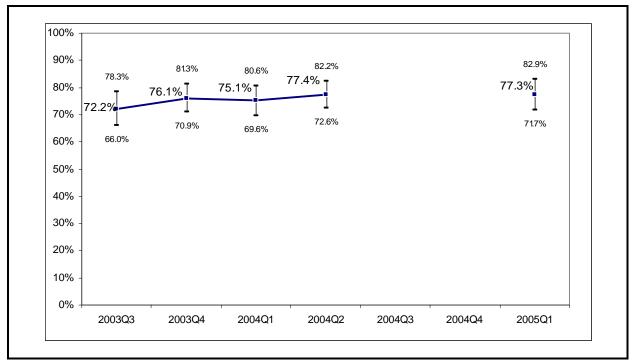
The ATS also includes a question about the health benefits of quitting (Exhibit 4-99), which indicates that one third of smokers think there is little benefit to quitting if someone has smoked a pack a day for more than 20 years. This percentage has remained stable over time and represents an opportunity for the program to correct misperceptions about the benefits of quitting at any age.





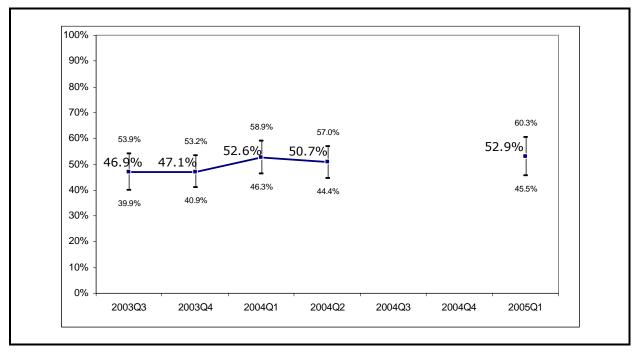
Note: This question was not asked in Q3 and Q4 2004.





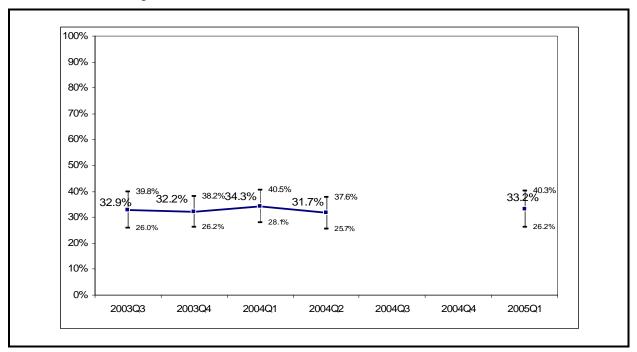
Note: This question was not asked in Q3 and Q4 2004.

#### Exhibit 4-98. Percentage of Adult Smokers Who Believed Smokers Have a Higher Risk of Cancers Other Than Lung Cancer, ATS Q3 2003–Q2 2004 and Q1 2005



Note: This question was not asked in Q3 and Q4 2004.

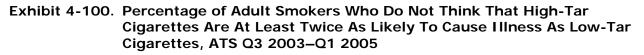
#### Exhibit 4-99. Percentage of Adult Smokers Who Think There Is Little Health Benefit To Quitting If a Person Has Smoked a Pack of Cigarettes a Day for More Than 20 Years, ATS Q3 2003–Q1 2005

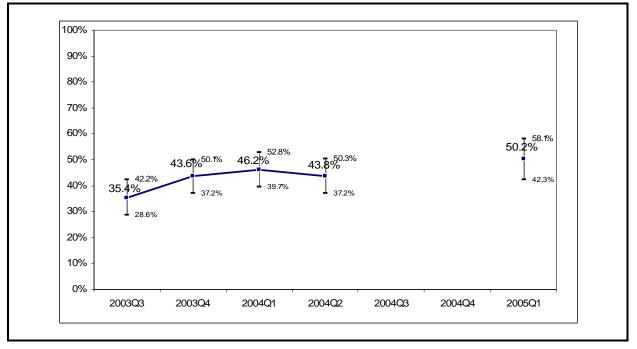


Note: This question was not asked in Q3 and Q4 2004.

In the 2004 IER, we noted that smokers had misperceptions about the dangers of nicotine patches and the benefits of low-tar cigarettes. Exhibits 4-100 and 4-101 indicate that smokers are becoming better informed over time. There was a modest decline in the perception that nicotine patches are dangerous and a rather dramatic increase (from 35 to 50 percent, p < 0.01) in the percentage of smokers who recognize that high-tar cigarettes do not cause twice as much damage as low-tar cigarettes—in other words, they are increasingly recognizing that low-tar cigarettes do not provide much health benefit. These changes have happened in the absence of any specific countermarketing ads targeting these knowledge deficits (as we recommended in the 2004 IER).

One possible explanation for the increased recognition that light cigarettes do not provide health benefits is the release of a study demonstrating that the majority of Marlboro Light smokers do not know that a typical smoker gets the same amount of tar from one light or ultra-light cigarette as from one regular cigarette (Cummings et al., 2004). This study was released in December 2004 and was highly publicized, including televised interviews with NYSDOH Commissioner Novello, MD, MPH, DrPH.





Note: This question was not asked in Q3 and Q4 2004.

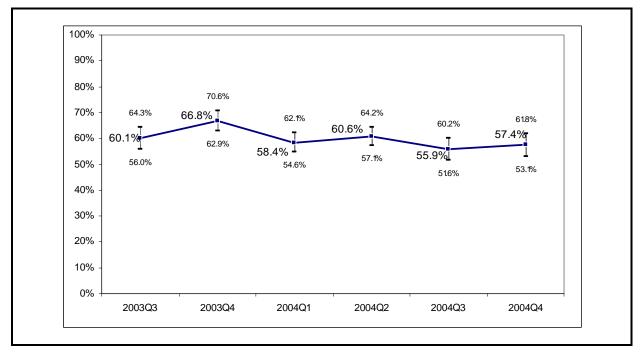


Exhibit 4-101. Percentage of Adult Smokers Who Believe Nicotine Patches Are Not as Addictive as Cigarettes, ATS Q3 2003–Q4 2004

We added a new and broader attitudinal question to the ATS in Q3 2004 to capture progress in decreasing the social acceptability of tobacco use. This question asks adults whether they believe the harmful effects of cigarettes have been exaggerated. In Q1 2005, 82 percent of adults indicated that they did not believe the harmful effects of smoking have been exaggerated, and the trend over the three quarters is statistically significant—a positive reflection of the program's efforts (Exhibit 4-102). Furthermore, the increase in this belief was most pronounced among smokers (from 53 to 66 percent) (Exhibit 4-103).

# Attitudes About Smoking in the Movies

A main focus of the Reality Check Youth Action Partners is reducing youth exposure to tobacco promotions in movies by pressuring the MPAA to give an "R" rating to movies that contain smoking or tobacco imagery. Reality Check seeks to motivate parents, PTAs, community organizations, and legislative bodies to express their views about smoking in movies and the "R" rating to the MPAA and adopt policies and resolutions supporting the "R" rating for movies that contain smoking or tobacco imagery. Activities under this initiative aim to increase adult awareness of the issue of smoking in the movies and challenge social norms about the acceptability and desirability of smoking images in the movies. Recent studies have demonstrated that smoking in the movies is associated with cigarette experimentation and initiation (Dalton et al., 2003). Youth are widely exposed to cigarette brands and images of people smoking in the movies (Sargent et al., 2001). In addition,

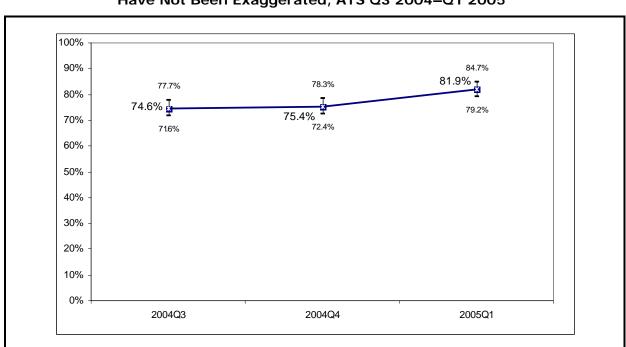
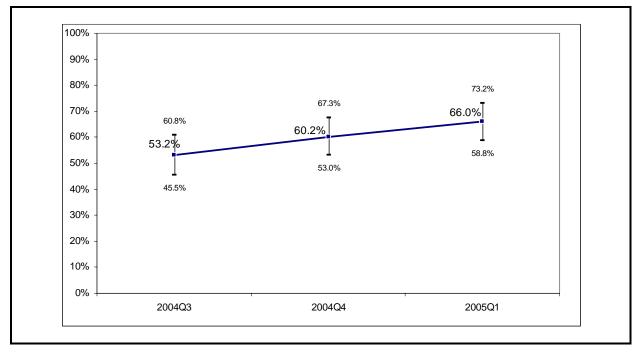


Exhibit 4-102. Percentage of Adults Who Believe the Harmful Effects of Cigarettes Have Not Been Exaggerated, ATS Q3 2004–Q1 2005

Exhibit 4-103. Percentage of Adult Smokers Who Believe the Harmful Effects of Cigarettes Have Not Been Exaggerated, ATS Q3 2004–Q1 2005



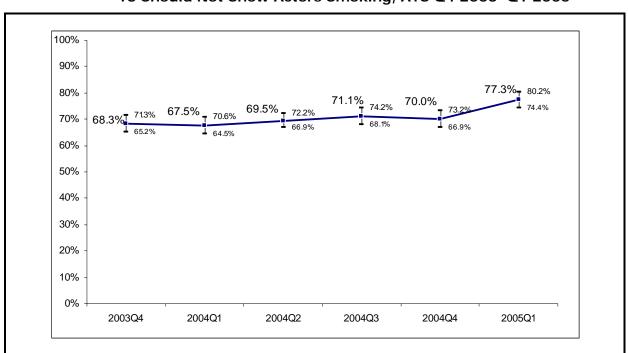
smoking is portrayed in predominantly positive contexts such as smoking by attractive and successful characters. This exposure clearly shapes the social environment for youth, and is thus an important target for tobacco control efforts. One proposed initiative to reduce youth exposure to smoking is to rate movies with a significant amount of smoking images "R" (Glantz, 2003). To gauge public support for such an initiative, we included a question in the ATS that measures agreement that movies with "a lot" of smoking should be rated "R."

Reality Check Youth Action Partners have conducted a number of activities to draw attention to the issue of smoking in the movies:

- Hollywood and Tobacco: Headed for a Breakup (October 2002 to May 2003)
  - Wrote and mailed approximately 200,000 letters to members of the MPAA, Director's Guild, and Hollywood celebrities such as Julia Roberts and Brad Pitt, petitioning them to stop smoking in movies.
  - Distributed nearly 100,000 "tobacco use alert" flyers at local movie rental stores and inside video cartridges, on pizza boxes, and at various other locations.
  - Held more than 200 smoke-free movie nights with approximately 10,000 youth in attendance to educate teens about smoking scenes in movies.
- Hollywood and Big Tobacco: Reality Check Strikes Again (December 2003 to May 2004)
  - Made more than 10,000 phone calls and visits requesting smoke-free movies from movie rental businesses.
  - Continued letter writing campaign—more than 97,000 letters (estimated) were written and delivered to key decision makers and celebrities in Hollywood.
  - Held more than 70 interactive movie nights (estimated) aimed at educating viewers about the impact of smoking in movies.
  - Educated more than 100 community organizations on the issue.

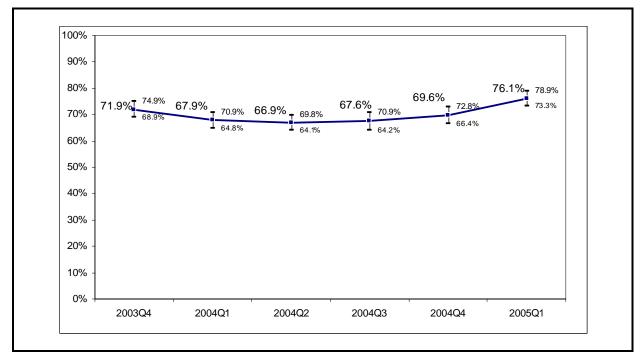
At the most recent measurement (Q1 2005), 77 percent of adults felt that movies rated G, PG, and PG-13 should not show actors smoking (Exhibit 4-104). This was a significant increase from Q4 2004, when 70 percent agreed with this statement. In addition, the percentage of adults who believe that smoking in the movies encourages smoking among teens decreased from Q4 2003 to Q2 2004 and then increased from Q2 2004 to Q1 2005 (Exhibit 4-105). Specifically, 76 percent of adults disagreed with the statement "smoking in the movies does not encourage smoking among teens" in the first quarter of 2005, the highest percentage since the ATS began.

These trends suggest that Reality Check's efforts have begun to influence attitudes in New York. However, because we did not have a monitoring system in place to track Reality Check activities over this entire time period, it is difficult to formally test whether Realty Check has had an impact on these attitudes.



#### Exhibit 4-104. Percentage of Adults Who Agree That Movies Rated G, PG, and PG-13 Should Not Show Actors Smoking, ATS Q4 2003–Q1 2005

#### Exhibit 4-105. Percentage of Adults Who Disagree With The Statement "Smoking In The Movies Does Not Encourage Smoking Among Teens," ATS Q4 2003–Q1 2005



# Adolescent Antitobacco Attitudes

Tobacco advertising and promotions have long portrayed smokers as being "cool" or desirable. Biener and Siegel (2000) note that tobacco promotional images are attractive to some youth who are "looking for an identity that the images are carefully designed to offer" (p. 410). Perhaps signaling a shift in social norms about smoking, data from the YTS suggests that significantly fewer youth think that smoking makes people look cool (Exhibit 4-106). In comparison with YTS data from 2002, there was a statistically significant decrease in the percentage of middle school youth (from 16% in 2002 to 11% in 2004) and high school youth (from 15% in 2002 to 11% in 2004) who felt that smoking made people look cool. Although these trends suggest that NYTCP is having an impact on social perceptions of the acceptability of tobacco use, without knowing whether this trend is reflective of a national trend, we cannot definitively link this change to program activities. As was seen with adults, youth beliefs about the dangers of smoking do not appear to be changing as rapidly. The percentage of middle school youth who feel it is safe to smoke cigarettes for just a year or two has remained relatively stable, while a modest, but statistically significant, decline occurred among high school students between 2002 and 2004 (Exhibit 4-107). However, in this case the percentage of youth who thought it was safe to smoke for just one or two years was quite low at baseline.

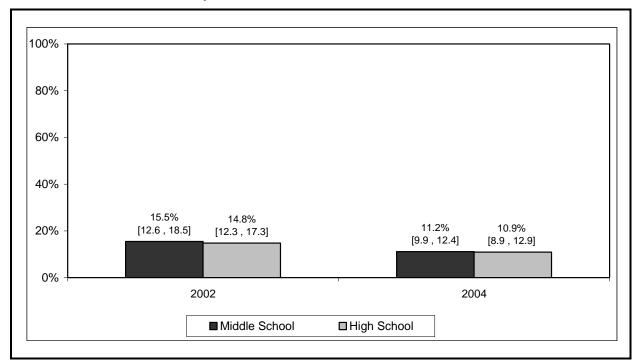
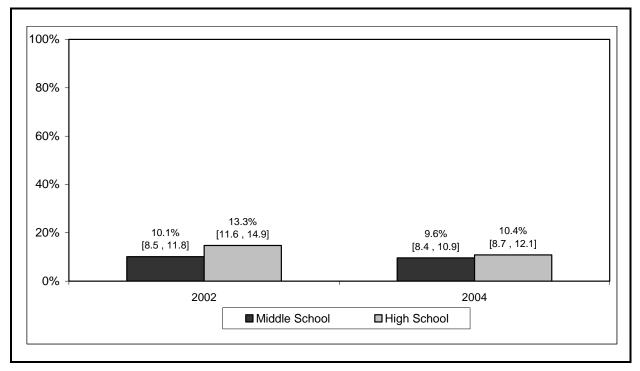
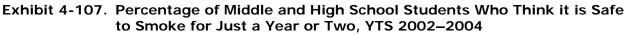


Exhibit 4-106. Percentage of Middle and High School Students Who Think Smoking Makes People Look Cool, YTS 2002–2004





# 4.3.9 Summary, Conclusions, and Recommendations

NYTCP's emphasis on efforts aimed at decreasing the social acceptability of tobacco use is well supported in the literature. There is strong evidence that policies and activities that result in fewer opportunities to view tobacco advertising, promotions, and other people smoking can result in changing societal norms and reducing smoking initiation and prevalence. However, given the enormous amount of money spent by tobacco companies to advertise and promote their products, it is worth acknowledging that changes in social norms are likely to be incremental, occurring over an extended time period. In addition, because the ASP initiative has only recently begun, it is premature to assess the impact of the program's activities on objectives that aim to reduce tobacco advertising in retail environments and in print media. However, despite this there are a few anecdotes that show that the program is already having an impact.

For example, Youth Partners conducted a statewide survey of middle and high school libraries and found that more than 70 percent of the school libraries had magazines with extensive tobacco advertising, and that some of these magazines are among the most popular among students. The Youth Partners strongly advocated for these magazines to remove tobacco advertising, and in March 2005, the New York State Attorney General wrote to tobacco companies urging them to remove tobacco advertising from school copies of the magazines. Subsequently, the National Association of Attorneys General reached an agreement with two national magazine publishers to eliminate tobacco advertising from school library editions nationwide.

One important missed opportunity that will likely affect the future success of the ASP initiative was the failure to coordinate Department mass media with the community-based ASP activities. Although NYTCP planned well in advance to ensure this coordination, barriers similar to those cited in the 2004 IER around mass media implementation thwarted the program's efforts.

Other findings in this chapter demonstrate that NYTCP has made noticeable progress toward addressing critiques of mass media efforts from the 2004 IER, including achieving the recommended levels of campaign awareness by airing "high impact" ads. We also found that the Community Partnership in the Buffalo area that aired the "Every Cigarette Does You Damage" campaign, in conjunction with NYSDOH-run ads, was able to achieve the recommended level of 60 percent confirmed awareness of specific advertisements. Although the cost of media is this area is much less than downstate media markets, it does serve as an example of the program's strategy of airing messages statewide and allocating mass media resources to local partners can be successful.

Although the program appears to have made significant progress in the implementation of televised media, we only have limited evidence that knowledge, normative beliefs, and attitudes have changed significantly over time among youth and adults. As we note elsewhere, this is partially explained by evolving programmatic strategies that are not easily captured in the relatively few knowledge, normative belief, and attitude questions in the ATS and YTS. In the coming year, RTI will continue to work with the program to enhance such intermediate indicators of success.

An overall summary of key findings and recommendations follows.

# **Program Implementation**

- NYTCP successfully launched a new and innovative intervention, the ASP initiative, in January 2005. This approach is well grounded in the scientific literature that shows how tobacco advertising and promotions influence smoking behavior, especially among youth.
- Sufficient time has not elapsed to fully evaluate this initiative, but early anecdotes point to the potential for these efforts to have an impact.
- The choice of countermarketing ads has improved significantly since the 2004 IER. This has had an impact on awareness of these ads among New Yorkers (see below).

### **Tobacco Advertising and Sponsorships**

 ATS data suggest modest declines in adults' awareness of tobacco advertising overall and in specific venues, such as sporting and cultural events.

- Youth's awareness of tobacco advertising in newspapers and magazines decreased from 2000 to 2004, although awareness of advertising on the Internet increased over the same time period.
- Based on in-store observations of advertising, point-of-purchase outdoor advertising is present in more than half of tobacco retailers and ubiquitous in retailers' interiors, with 94 percent having some interior advertising.
  - Retailers had an average of 16 tobacco ads on their store interiors.
- Data from the ATS and YTS shows similar results to the in-store observational data.
  - 82–83 percent of adults and 88 percent of middle and high school youth are aware of tobacco advertising in retail stores.
- Openness to tobacco marketing among high school students was constant from 2000 to 2004 but declined among middle school youth.

### Awareness of and Receptivity to Antismoking Advertising

- Patterns in smokers' awareness of specific antismoking message themes responded to the program's tobacco countermarketing efforts.
  - Awareness increased when effective ads were aired.
  - Awareness decreased when countermarketing efforts were off the air.
- Confirmed awareness of specific ads increased from 33 to 41 percent, an increase that corresponded with improved choices of ads.
  - Awareness reached 60 percent in the Buffalo area when the local Community Partnership aired "high impact" countermarketing messages in conjunction with NYSDOH run ads.

### Trends in Knowledge, Attitudes, and Beliefs

- Trends in knowledge and perceptions of health risks were mixed from Q3 2003 to Q1 2005.
  - Perceptions of the risks of smoking-related diseases remained stable among smokers. Awareness of NYTCP-sponsored antismoking ads was associated with greater recognition of the health risks of smoking.
  - Nearly one third of smokers see little benefit in quitting if a smoker has smoked a pack a day for 20 years or more.
  - However, an increasing percentage of smokers agree that the harmful effects of smoking have not been exaggerated.
  - Smokers' misperceptions of the benefits of low-tar cigarettes and the addictiveness of nicotine patches decreased significantly over time but persist.
  - Youth perceptions of the dangers of smoking remained relatively stable among middle school students and increased modestly among high school students.
- Attitudes and beliefs about smoking in the movies also present a mixed picture.
  - An increasing percentage of adults agree that movies rated G, PG, and PG-13 should not show actors smoking.
  - Adults increasingly recognize that smoking in the movies influences youth smoking.

### Coverage of Tobacco in the News

- Data from the ATS and the Tobacco News Tracking system suggest that the "slant" of tobacco-related news coverage has remained stable over time.
- The volume of news stories on tobacco dropped dramatically (to a third of the baseline level) after passing the 1-year anniversaries of the New York City and State clean indoor air laws.

#### Conclusions and Recommendations

- The program has made significant strides in improving countermarketing efforts by choosing "high impact" ads.
- Delays in the approval of media continued to causes gaps in mass media efforts that adversely impacted awareness of tobacco control advertising among New Yorkers. Greater efforts must be made to prevent unplanned gaps in mass media efforts to ensure progress towards meeting program objectives.
- Awareness of media messages had a positive influence on smokers' knowledge of health risks.
- Several knowledge, attitudes, and beliefs improved since the 2004 IER; however, others did not change, possibly highlighting the difficulty of cleanly measuring knowledge, attitudes, and beliefs over time for a program with diverse and evolving activities and messages.
  - In the 2004 IER, we recommended countermarketing and other efforts to correct smokers' misperceptions about low-tar cigarettes and nicotine patches. This recommendation is still valid given that knowledge gaps continue; both the influence of existing programmatic efforts and/or secular trends in these perceptions suggest that immediate programmatic action is not necessary.

# 4.4 Goal 3: Promote Cessation from Tobacco Use

### 4.4.1 Overview

In this section of the report, we address several evaluation questions intended to describe the programmatic efforts since the 2004 IER that promote cessation from tobacco use. As noted in the NYTCP Strategic Plan, implementation of effective strategies to promote cessation from tobacco use is a key investment for a tobacco control program to achieve near-term savings in the cost of medical care to treat tobacco-related diseases and reductions in the number of tobacco-related illnesses and deaths (CDC, 1999; USDHHS, 2000; Hopkins et al., 2001). Each year in New York State, 25,000 residents die as a result of cigarette use, losing an average of 14 years of life, and 570,000 residents suffer from serious tobacco-caused diseases. Each year, the state and its residents spend \$6.4 billion to treat the diseases caused by cigarette use. Stopping smoking now greatly reduces the likelihood that a smoker will develop a smoking-related illness or die prematurely as a result of tobacco use. The January 2005 Strategic Plan includes the following objectives intended to promote cessation:

- 1. Increase the number of health care provider organizations that have a system in place to screen all patients for tobacco use and provide brief advice to quit at every patient visit.
- 2. Increase the percentage of smokers who have quit successfully (for at least 6 months) in the past 12 months.
- Increase the number of Medicaid recipients who access pharmacotherapy for smoking cessation through Medicaid or through the New York State Smokers' Quitline.
- 4. Increase the percentage of smokers with health insurance who report that their health plan provides coverage for tobacco dependence treatment.
- 5. Increase the number of smokers referred to the New York State Smokers' Quitline through the Fax-to-Quit program.
- 6. Increase the percentage of smokers who have heard of and who have called the New York State Smokers' Quitline.

All of these objectives are being pursued by the program; however, according to the program, some are being pursued more actively than others. We focus our evaluation efforts on the objectives that are being pursued more actively: 1, 2, 5, and 6. In this section of the report, we address a number of evaluation questions intended to describe the programmatic efforts to promote cessation since the 2004 IER:

- 1. What programmatic activities have been implemented in support of Goal 3?
- 2. Prior to implementation of the Cessation Centers, to what extent do health care provider organizations have a system in place to screen all patients for tobacco use and provide brief advice to quit at every patient visit?
- 3. What percentage of smokers report that health care providers offer support for cessation?
- 4. Has the percentage of smokers who have heard of and called the New York State Smokers' Quitline increased over time?
- 5. Is NRT use increasing over time?
- 6. Are cessation outcomes (e.g., percentage of smokers who have quit for at least 6 months, number of quit attempts, duration of longest quit attempt) improving over time?

Smoking cessation is a process, and smokers generally make several quit attempts before succeeding. Although smoking cessation has been thoroughly studied, the dynamics of the smoking cessation process are still not completely understood. A common model of the

smoking cessation process uses as a basis a stage model of behavior change and hypothesizes that smokers cycle through a sequence of stages in trying to quit. An alternative model supposes that smokers move along a continuum of "readiness to quit" rather than going through stages. We do not use any specific model for this report but rather report on several outcomes that are consistent with smokers moving through stages or along a continuum while trying to quit. Because some smokers gradually cut back as a quit strategy, we also include cigarettes per day as an outcome. There is some evidence that this strategy might increase the chances of future success in quitting (Hyland et al., 2005).

As a result of personal or environmental influences, a smoker may reach a point at which he/she decides to quit. Once the smoker decides to quit, he/she chooses a cessation strategy. Some smokers decide to quit all at once without any assistance from others. Other smokers seek help from friends, family, counseling, NRT, and other sources. Other smokers switch to light cigarettes or reduce consumption (the number of days smoked or the number of cigarettes per day). Obviously, smokers may choose or end up using multiple strategies to quit.

NYTCP's efforts are aimed at encouraging smoking cessation through the use of evidencebased strategies (i.e., Quitline, NRT starter kits, promotion of physician assistance in quitting through the Fax-to-Quit and Cessation Center programs) and discouraging less effective methods. As noted above, reduced consumption may increase the likelihood of future cessation success (Hyland et al., 2005). Current evidence shows that switching to light cigarettes is not an effective method for quitting (Hyland et al., 2003).

It should be emphasized that it generally takes time before health promotion interventions achieve detectable behavioral outcomes (Hornik, 2002; Lefebvre, 1990). It is also not known with certainty how much time is required to achieve behavior change, including quitting smoking. Therefore, in addition to monitoring trends in long-term cessation outcomes (e.g., measures of successful cessation), we also monitor (to the extent data allow) awareness of and exposure to program activities (e.g., Quitline and media ads) or tobacco control events and short-term cessation outcomes (e.g., intentions to quit).

To address the first evaluation question, we draw on data from the CAT system. Question 2 is addressed using data from the health care organization study. Data from the ATS are used to address Questions 3 through 6, and data from the New York State Smokers' Quitline are used to address Question 4.

### 4.4.2 Summary of Activities in Support of Goal 3

To achieve the objectives of Goal 3, NYTCP has implemented a number of activities based on strategies recommended by the Task Force on Community Preventive Services (www.thecommunityguide.org\tobacco) as effective in preventing and reducing tobacco use. Since the 2004 IER, the NYTCP made several notable enhancements to cessation services (see Chapter 2 for a more detailed description of these program activities):

- Cessation Centers began operations in December 2004.
- Implementation and promotion of the fax-to-quit program began in December 2004.
- Distribution of NRT starter kits via the Quitline began in December 2004.
- More effective ads aimed at encouraging cessation have been aired.

In this section, we describe the activities planned by the Community Partners in support of Goal 3 as reported in the CAT system. At this stage of the evaluation, the only data available from the CAT system are planned activities (strategies) for the 2004–2005 fiscal year, as reported in Community Partner annual plans. Thus, we are limited at this time to describing planned activities and noting if the Cessation Center plans appear to address their purpose.

The 19 Cessation Centers began their work in January 2005. The primary focus of these centers is to promote the systematic screening and counseling of tobacco users by all health care providers, in accordance with the Public Health Service (PHS) guidelines for smoking cessation; increase the availability of cessation services in the community; and work with other funded partners to encourage tobacco users to quit.

In Exhibit 4-108, we summarize the strategies that Community Partners are planning to implement to achieve their cessation objectives. As noted in Chapter 2, 17 percent of all strategies entered into CAT for the 2004–2005 fiscal year were entered with a goal of promoting cessation from tobacco use. For the Cessation Centers, 87 percent of strategies are focused on Goal 3, while the comparable percentage for Community Partnerships and Reality Check Youth Action Partners is 20 and 2 percent, respectively.

Within Goal 3 alone, the objectives reported most frequently across all Community Partners were increasing the number of health care provider organizations that have a system to screen all patients for tobacco use and provide brief advice to quit at all visits (35 percent of all cessation strategies) and increasing the number of Medicaid recipients who access pharmacotherapy (31 percent of all cessation strategies).

Of all Cessation Center strategies that were focused on promoting cessation, 54 percent were aimed at increasing the number of health care provider organizations that have a system to screen all patients for tobacco use and provide brief advice to quit at all visits. The two main focus areas used to achieve that objective were Monitoring/Assessment of Organizational Policies and Practices and Advocating with Organizational Decision Makers.

# Exhibit 4-108. Planned Activities for Goal 3 by Community Partners, Fiscal Year 2004–2005

Objective	Cessation Centers	Community Partnerships	Reality Check Youth Action Partners	Joint Partner Strategies	Total
Increase number of health care provider organizations that have a system to screen all patients for tobacco use and provide brief advice to quit at all visits	86 54%	25 18%	5 24%	0 0%	116 35%
Increase number of Medicaid recipients who access pharmacotherapy for smoking cessation through Medicaid or the Quitline	19 12%	35 25%	0 0%	0 0%	54 16%
Increase the number of non-Medicaid eligible low-income tobacco users who receive free pharmacotherapy to support a cessation attempt <sup>a</sup>	8 5%	4 3%	0 0%	0 0%	12 4%
Increase percentage of smokers who have heard of and called the New York State Smokers' Quitline	20 13%	66 46%	10 48%	5 100%	101 31%
Increase percentage of smokers with health insurance who report that their health plan covers tobacco dependence treatment	2 1%	3 2%	0 0%	0 0%	5 2%
Increase number of smokers referred to the New York State Smokers' Quitline through the Fax-to-Quit program	10 6%	2 1%	1 5%	0 0%	13 4%
Increase percentage of smokers who quit successfully (for at least 6 months) in past 12 months	15 9%	7 5%	5 24%	0 0%	27 8%
Total	160 100%	142 100%	21 100%	5 100%	328 100%

<sup>a</sup>This objective does not appear in the 2005 Strategic Plan but was approved as part of the Annual Plans for fiscal year 2004–2005.

Under Monitoring/Assessment, Cessation Centers mentioned

- assessing policies and practices related to tobacco use and treatment;
- assessing needs for training, materials, and technical assistance; and
- monitoring Fax-to-Quit referrals.

Within the focus area of Advocating with Organizational Decision Makers, Cessation Center plan entries included

- developing training curriculum and conducting trainings;
- using meetings, newsletters, conferences, and Web sites to educate administrators and providers about the 5As, the Quitline, and other cessation topics; and

 assisting partner institutions in developing quality assurance plans and action plans and incorporating PHS guidelines.

Following are descriptions of the types of strategies reported by Cessation Centers within each of the cessation-related objectives.

For the objective related to increasing the percentage of smokers who have heard of and called the Quitline, Cessation Centers reported 20 strategies, or 13 percent of all of their cessation-focused strategies. These were classified primarily within the focus areas of Provision or Promotion of Cessation Services and Paid Media and include

- incorporating the Quitline number and services in brochures, publications, and handouts;
- encouraging partners to put a link to the Quitline on their Web site; and
- running a media campaign to educate smokers about the health risks of smoking, the benefits of quitting, and the Quitline services available.

Within the objective focusing on increasing the number of Medicaid recipients who access pharmacotherapy, Cessation Centers classified strategies under the focus areas of Provision or Promotion of Cessation Services and Advocating with Organizational Decision Makers. Strategies include

- training health care providers and providing them with materials,
- distributing brochures and materials to patients and to the general public at health events,
- providing pharmacies with posters and brochures, and
- recruiting for cessation services at Medicaid offices.

Cessation Centers reported 15 strategies (9 percent of all Cessation Center strategies within the goal of cessation) related to the objective of increasing the number of smokers who quit successfully in the past 12 months. The majority of these strategies describe direct cessation services, categorized in the focus area of Provision or Promotion of Cessation Services. Strategies include providing cessation counseling or workshops and following up with participants who quit. One Cessation Center reported a paid media strategy, with an emphasis on coinciding messages with the Great American Smokeout, New Year's resolutions, CIAA anniversaries, and other occasions to maximize the impact of the message.

Ten Cessation Center strategies (6 percent) were reported specifically with the objective of increasing the number of smokers referred to the Quitline through the Fax-to-Quit program. These strategies were classified as the focus areas of Provision or Promotion of Cessation Services and Advocating with Organizational Decision Makers and include

- training providers on the Fax-to-Quit program, sometimes through existing meetings or trainings;
- distributing quit kits to providers;
- promoting the Fax-to-Quit program in partnering health care provider organizations with flyers and posters; and
- making the Fax-to-Quit forms available on their Web site.

Community Partners also addressed the objective of increasing the number of Medicaid recipients who access pharmacotherapy. Community Partnerships reported the focus areas of Provision or Promotion of Cessation Services and Advocating with Organizational Decision Makers to conduct the following types of activities:

- outreach to human service agencies, including brochures, flyers, and quit kits, with attention to cultural sensitivity and literacy level;
- academic detailing to health care provider organizations; and
- pharmacist education and drugstore displays.

Related to the objective focused on increasing the number of smokers who have heard of and called the New York State Smokers' Quitline, Community Partnership activities were classified as promotion or provision of cessation services and paid media, and they include

- organizing specific events, such as the Great American Smokeout, World No Tobacco Day, and Kick Butts Day;
- distributing a cessation resource guide through Web sites, physicians, dentists, pharmacies, and libraries;
- distributing napkins and coasters that have Quitline information to bars and restaurants; and
- implementing paid media efforts, including print, radio, and television messages.

Reality Check Youth Action Partner strategies for increasing smoker awareness of and contact with the Quitline include distributing information about the Quitline at community events and partner-sponsored events and compiling resource guides for youth-specific cessation services.

From January through May 2005, partners' paid media efforts related to promoting cessation made up 41 percent of all paid media efforts. These paid media activities primarily included television, radio, and newspaper advertisements. Specifically, there were 17,334 television ads aired (\$479,718); 2,941 radio ads aired (\$107,772); 297 newspaper ads printed (\$163,966); mass mailings distributed to 20,000 recipients (cost not available); and

1,186 other media items disseminated, including theater slides, transit postings, and billboards.

## 4.4.3 Prior to Implementation of the Cessation Centers, To What Extent Do Health Care Provider Organizations Have a System in Place to Screen All Patients for Tobacco Use and Provide Brief Advice to Quit at Every Patient Visit?

To address this and related questions, RTI designed the health care organization and provider study in collaboration with NYTCP. The study was designed to gather information about existing systems, practices, and policies to address and treat tobacco use in hospitals and medical practices in New York State.

This study is intended to provide baseline information about these systems, practices, and policies at both the organizational level and the provider level, during the beginning stages of the Cessation Center effort. The 2000 PHS Guideline for Treating Tobacco Use and Dependence provides a number of recommendations for system-level interventions to promote effective cessation efforts. Most of these recommendations focus on implementing systems to assess tobacco use and promote provider cessation efforts. These system-level interventions have been found to promote guideline-concordant care among providers. More details on this study are provided in Chapter 3.

To date, RTI has completed the hospital component of the study, during which we conducted 96 interviews with hospitals, or 82 percent of the eligible sampled hospitals. Information based on the hospital data is presented in this report to provide a perspective on the current status of tobacco use screening and assessment systems in health care organizations in New York State. The medical practice and provider portions of the study are currently in progress and will be included in subsequent reports.

The hospital interviews were designed to provide information across a number of domains, including

- clinical practice requirements and recommendations for identifying and treating tobacco use;
- systems to cue or prompt providers to identify and treat patient tobacco use;
- systems for documenting tobacco use status and cessation interventions;
- awareness of specific NYTCP initiatives, such as the New York State Smokers' Quitline, Medicaid coverage of tobacco cessation pharmacotherapies, and the Cessation Center initiative;
- policies regarding tobacco use by staff, patients, and visitors;
- organizational and provider-level barriers to addressing patient tobacco use and cessation; and

 basic demographic information about the hospitals (e.g., teaching hospital, number of beds).

Based on the hospital study, fewer than 40 percent of hospitals have written clinical guidelines or protocols for diagnosing and treating tobacco dependence. Among hospitals with guidelines, more than half (51.3 percent) developed their own internal or "home-grown" guidelines rather than use existing clinical guidelines, such as the 2000 PHS Service Guideline for Treating Tobacco Use and Dependence. And 59 percent of hospitals with guidelines reported that they do not require providers to receive training about tobacco use assessment and treatment.

The 2000 PHS Guideline for Treating Tobacco Use and Dependence provides the 5As as a brief intervention clinicians can use to aid cessation among their patients:

- ask (identify and document tobacco use status for every patient at every visit),
- advise (urge every tobacco user to quit),
- assess (determine whether the tobacco user is willing to make a quit attempt),
- assist (for patients willing to make a quit attempt, use counseling and pharmacotherapy to help him/her quit),<sup>3</sup> and
- arrange (schedule follow-up contact for those willing to make a quit attempt).

Exhibit 4-109 presents information about the extent to which hospitals include the 5As as required or recommended practices for their providers. The first column in the exhibit presents the rates at which hospitals currently require each strategy, while the second column shows the combined percentages of requiring or recommending the strategy.

Almost all hospitals require or recommend that providers ask new patients about their tobacco use; however, a much smaller percentage include tobacco use as a vital sign where all patients are asked at every visit as recommended by the guideline. It is also notable that although the majority of hospitals do at least include the 5 A's strategies as recommended practices, a much smaller percentage actually require providers to deliver brief interventions (measured in this study as advice/counseling and NRT, if appropriate). Some of this difference may reflect the fact that hospitals often refer tobacco users to other specialists, rather than provide the brief intervention themselves. Based on data from this study, more than 40 percent of hospitals have a dedicated tobacco treatment specialist. In terms of overall provision of services to tobacco users, more than 60 percent of hospitals offer

<sup>&</sup>lt;sup>3</sup>To measure "Assist," we used a combination of two questions: "Do you... (1) provide brief advice or counseling to quit using tobacco, and (2) offer nicotine replacement (NRT) or other stop-smoking medications (such a bupropion) when appropriate." Because of the way the advice/counseling question was asked, it is not possible to determine whether all hospitals that answered yes to this question were including counseling to help patients develop a quit plan or only advice.

Strategy	Require (%)	Require or Recommend (%)
Ask new patients	86.5	99.4
Ask existing patients	38.5	58.5
Advise	45.8	92.2
Assess	29.2	85.8
Assist	13.3	84.3
Arrange	24.0	61.2

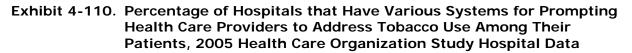
Exhibit 4-109.	Percentage of Hospitals that Adhere to the "5As," 2005 Health Care
	Organization and Provider Study Hospital Data

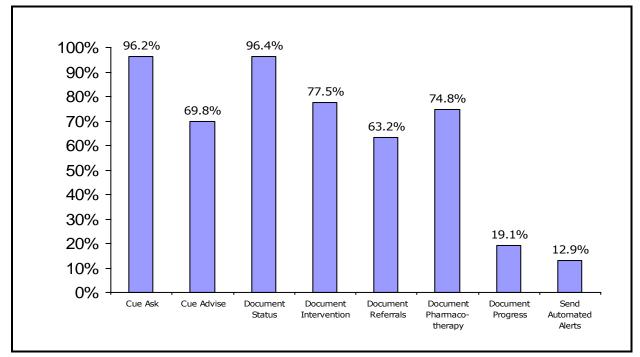
tobacco dependence treatment to all tobacco users who are admitted (61.3 percent); however, a substantial minority (31.3 percent) treats only some tobacco users, and 6 percent do not treat any tobacco users. These percentages were derived from responses to the following question: "Does your hospital offer tobacco dependence treatment to all, some, or none of the tobacco users who are admitted to your hospital?"

Exhibit 4-110 presents information about current systems for cueing or prompting providers to assess tobacco use status, to provide advice and interventions, and to document this information. In general, it appears that almost all hospitals have a system to cue providers to assess tobacco use status and to document status. A smaller percentage of hospitals have a system to cue providers to advise tobacco use cessation to patients and to document interventions, referrals, and pharmacotherapy. And only a small percentage (<20 percent) of hospitals have a formalized process for tracking patients' tobacco use cessation progress and/or their process of care, or a system by which electronic or automated notices are sent to providers to alert them about patients who use tobacco or to remind them to advise patients to quit.

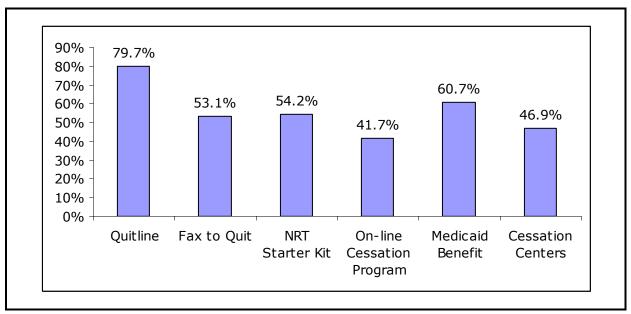
Finally, we measured awareness of the New York State Smokers' Quitline, the pharmacotherapy benefit for Medicaid patients, and the Cessation Centers themselves. Nearly 80 percent of hospitals have heard of the Quitline, but a lower percentage were aware of several of the Quitline-related services, such as Fax-to-Quit (53 percent), the NRT 2-week starter kits (54 percent), and the online cessation program or QuitNet (42 percent) (Exhibit 4-111).

Awareness of the Medicaid benefit and of the Cessation Centers was somewhat lower than awareness of the Quitline: 61 percent of respondents to the hospital survey were aware of the Medicaid coverage of tobacco cessation pharmacotherapies, and 47 percent were aware of the Cessation Centers. The latter finding is not surprising since the Cessation Centers were recently created. Seven of the hospitals in our sample were Cessation Centers, and another 26 had either had contact with a Cessation Center or were already working with one





#### Exhibit 4-111. Percentage of Hospitals that are Aware of State-Sponsored Cessation Resources, 2005 Health Care Organization Study Hospital Data



to develop systems. Based on these data, it is estimated that 19 percent of hospitals that are not Cessation Centers have already been in contact or are actively working with Cessation Centers. It is important to remember that this survey was designed to gather baseline information about hospitals and therefore was implemented at the beginning of the Cessation Center initiative. The primary purpose of the Cessation Centers is to work with provider organizations and providers to increase the role of health care providers in promoting cessation; thus, the results of the survey presented here do not reflect on the effectiveness of Cessation Center efforts. The data presented above (together with a forthcoming baseline survey of providers) establish baseline measures against which we will measure progress in the future with additional surveys of provider organizations and providers.

## 4.4.4 What Percentage of Smokers Report that Their Health Care Providers Offer Support for Cessation?

To provide smokers' perspectives on the extent to which health care providers are asking smokers if they use tobacco and assisting them with quitting, we report data from the ATS. For smokers who report going to a health care provider in the past 12 months, we ask them the following questions:

- During the past 12 months, did any doctor, nurse, or health professional ask if you smoke?
- [Asked of all smokers] In the past 12 months, has a doctor, nurse, or other health professional advised you to quit smoking?
  - [If yes, then ask:] When a doctor, nurse, or other health professional advised you to quit smoking, did he/she do any of the following?
    - Prescribe or recommend a nicotine patch, nicotine gum, nasal spray, an inhaler, or pills such as Zyban?
    - Suggest that you set a specific date to stop smoking?
    - Suggest that you use a smoking cessation class, program, or counseling?
    - Suggest you call a telephone quit line?
    - Provide you with booklets, videos, or other materials to help you quit smoking on your own?
    - Schedule a follow-up visit to discuss your progress?

We report several key statistics: the percentage of smokers who went to a health care provider in the past 12 months (Exhibit 4-112) and who were asked if they smoke when they visited their provider (Exhibit 4-113), were advised to quit by their provider (Exhibit 4-114), and were assisted in quitting by their health care provider (Exhibit 4-115). For the latter, we considered that smokers were assisted by the provider if the provider took any of the actions listed above (e.g., prescribed nicotine patches, suggested calling a quitline) with the exception of scheduling a follow-up visit. We consider the latter response as "arranging" in the 5A's classification.



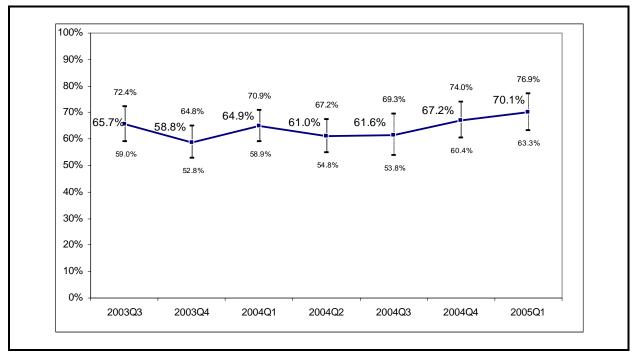
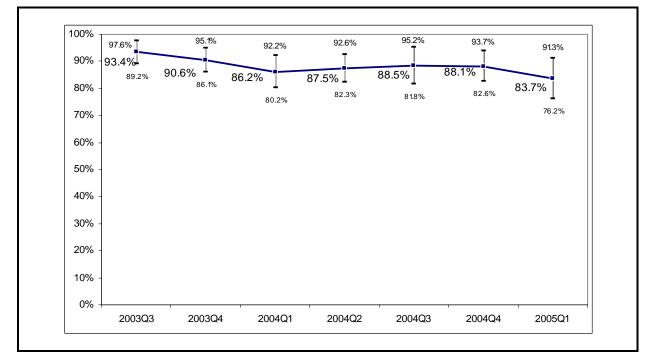
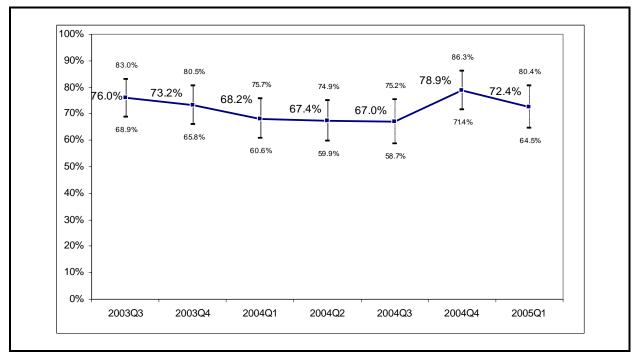


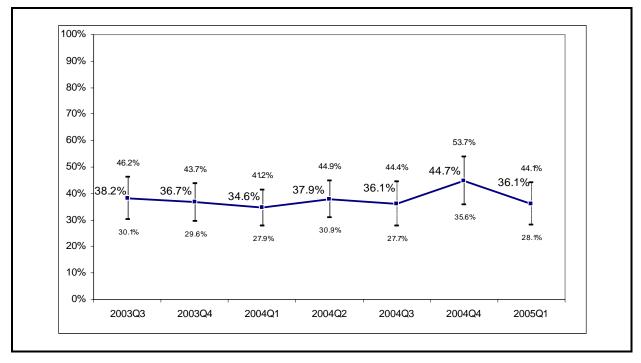
Exhibit 4-113. Percentage of Adult Smokers Who Were Asked If They Smoked When They Visited a Health Care Provider in the Past 12 Months, ATS Q3 2003–Q1 2005



#### Exhibit 4-114. Percentage of Adult Smokers Who Were Advised to Quit Smoking When They Visited a Health Care Provider in the Past 12 Months, ATS Q3 2003–Q1 2005



#### Exhibit 4-115. Percentage of Adult Smokers Who Report that their Health Care Provider Assisted Them with Smoking Cessation When They Visited a Health Care Provider in the Past 12 Months, ATS Q3 2003–Q1 2005



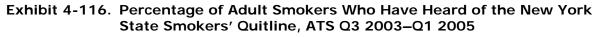
These data show that a high proportion of smokers are asked if they smoke when they visit their providers, but there is a statistically significant downward trend from 93 to 84 percent of smokers (see Exhibit 4-113). Approximately 70 percent of smokers have been advised to quit in the past 12 months when they visited a health care provider, and this percentage has remained stable over time (see Exhibit 4-114). In addition, only slightly more than one third of smokers received assistance in quitting when they visited their provider in the past 12 months (those who were not advised to quit are included as not receiving assistance). Because 70 percent of smokers went to a health care provider, this suggests that as of Q1 2005, 58.7, 50.8, and 25.3 percent of all smokers were asked about their tobacco use, advised to quit, and assisted with smoking cessation by a health care provider, respectively, in the past 12 months.

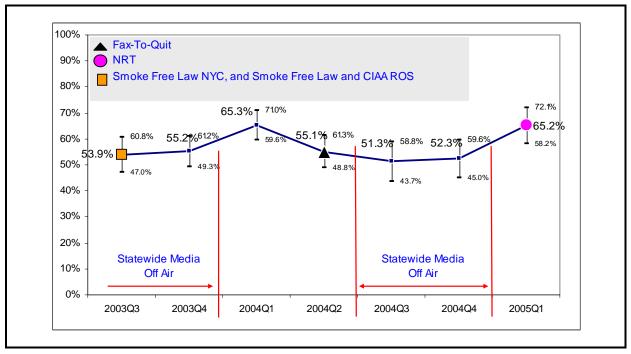
## 4.4.5 Has the Percentage of Smokers Who Have Heard of and Called the New York State Smokers' Quitline Increased Over Time?

Smokers' awareness and use of the Quitline was assessed by analyzing responses to the ATS, which asks smokers if they are aware of and have called the Quitline. In addition, we monitored Quitline call volume to assess the demand for the Quitline. In our analyses of the trends of smokers' awareness and use of the Quitline, we indicate potentially influential factors such as when NYTCP is airing countermarketing ads that are tagged with the Quitline name and number, the introduction of the Fax-to-Quit referral program, and the start of the 2-week NRT starter kits. However, it should be noted that the latter has not been actively promoted at this time.

Awareness of the Quitline, as reported in the ATS, has fluctuated over time (Exhibit 4-116), reaching its lowest level in Q3 2004 when the program's countermarketing efforts were off the air and the Community Partners contracts were pending execution. Awareness peaked in Q1 2004 and Q1 2005, possibly reflecting smokers' greater attention to NYTCP-sponsored ads and smoking cessation in conjunction with the New Year. However, the pattern of awareness also suggests that the absence of media negatively influenced awareness of the Quitline, consistent with studies that have shown a strong link between the promotion of Quitlines via mass media and Quitline call volume. To formally test the relationship between awareness of NYTCP-sponsored media and awareness of the Quitline, we performed a logistic regression of smokers' awareness of the Quitline over time as a function of awareness of the program's SHS and cessation media messages and other factors.<sup>4</sup> This analysis shows that the odds of being aware of the Quitline are double for those people who have seen cessation messages compared to those who have not (OR = 2.0, p < 0.002). Similarly, confirmed awareness of any SHS-related media messages was also significantly

<sup>&</sup>lt;sup>4</sup>These include age, education, race/ethnicity, gender, income, monthly cigarette consumption, and a time trend.



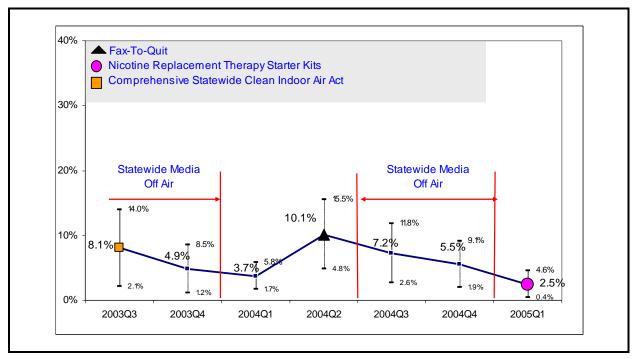


related to awareness of the Quitline, but the relationship was not as strong as for cessation messages and only marginally statistically significant (OR = 1.4, p < 0.1).

Self-reported calls follow a somewhat different pattern than that of awareness. Although there is not a statistically significant trend in self-reported calls to the Quitline, the percentage of smokers who called the Quitline increased from 3.7 to 10.1 percent from Q1 2004 to Q2 2004, only to drop to 2.5 percent by Q1 2005 (Exhibit 4-117). We also performed a similar regression for calling the Quitline (conditional on having heard of the Quitline). This shows no relationship between recalling media messages and calling the Quitline, perhaps because of the more limited sample size for this analysis.

Because smokers are asked if they have ever called the Quitline, self-reports of calls to the Quitline from the ATS may not be a sensitive measure of changes in Quitline calling behavior. As a result, we further investigated trends in calls to the Quitline with call volume data. Exhibit 4-118 illustrates the trend in Quitline call volume from January 2000 to April 2005. The purpose of the plot is to illustrate trends and suggest possible relationships with other factors, such as mass media promotion of the Quitline. This plot suggests a relationship between media and call volume (call volume is generally lower during periods when the media campaign was off the air). We also estimated a regression model with daily call volume as the dependent variable to further investigate the impact of media on call

#### Exhibit 4-117. Percentage of Adult Smokers Who Have Ever Called the New York State Smokers' Quitline, ATS Q3 2003–Q1 2005



volume (the regression included an indicator variable for the time that statewide media was on the air versus off the air). Media being on the air was significantly related to call volume (p < 0.001).

To further investigate the factors associated with call volume, we examine the Quitline callers' reported reasons (source of referral) for calling the Quitline. The Quitline tracks the source of referral mentioned by callers. Callers responses are recorded verbatim, and we classified responses into the following categories:

- Advertising
- Fax-to-Quit
- Health care providers
- Other referrals (e.g., friends, family)

We plot total call volume by source, collapsing referrals into four categories: advertising, Fax-to-Quit, health care providers, and all other referrals (Exhibit 4-119). As evident from this plot, advertising has been and remains an important factor influencing call volume. This exhibit also shows that referrals from the Fax-to-Quit program began in October 2004 and increased to 16 percent of referrals by April 2005. This program allows health care providers

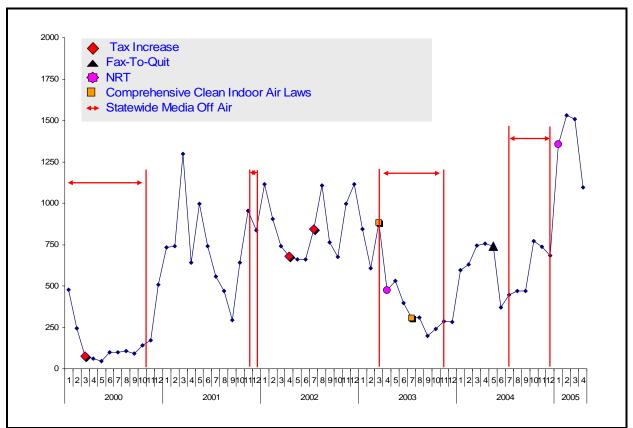
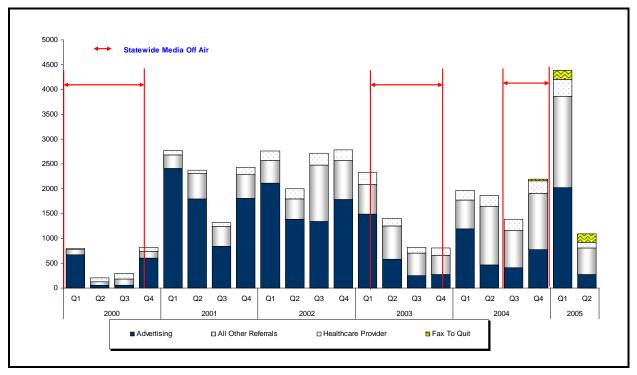


Exhibit 4-118. New York Smokers' Quitline Call Volume, January 2000–April 2005

to fax a referral to the Quitline so that their patients will receive a follow-up call for smoking cessation counseling from the Quitline. Given NYTCP's emphasis on this program (Objective 3E), this is a promising trend.

## 4.4.6 Is Nicotine Replacement Therapy Use Increasing Over Time?

Beginning in December 2004, NYTCP began offering 2-week starter kits of NRT to Quitline callers. According to the program, this feature of the Quitline is being phased in and was not actively promoted until May 2005. As a result, this service had not yet affected the self-reported trends in NRT use in the ATS through Q1 2005. However, the results of a similar distribution of free NRT in New York City suggest that this new feature of the statewide Quitline will increase NRT use and quit rates among people who take advantage of the benefit. New York City's Department of Health and Mental Hygiene distributed a 6-week course of free NRT via the Quitline following implementation of the City's smoke-free law. Results of a study by Miller et al. (2005) found that 6-month quit rates were 33 percent among NRT recipients compared to 6 percent among a comparison group of Quitline callers who requested, but did not receive, NRT. Based on evaluations of a number of NRT giveaways, including the New York City program, NYTCP determined that the most cost-



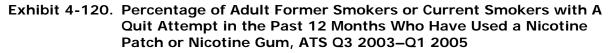
## Exhibit 4-119. Number of Calls to the New York State Smokers' Quitline by Sources of Referral, Q1 2000–Q2 2005

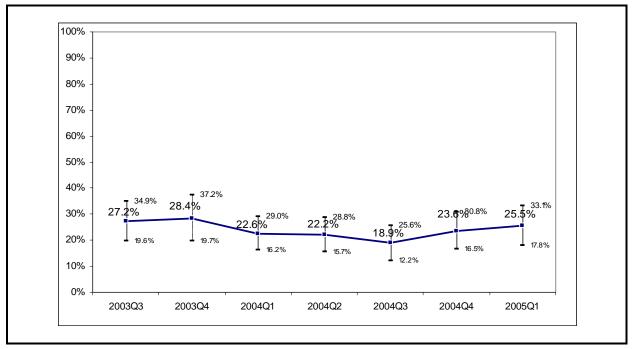
effective approach to distributing NRT starter kits was to ship 2-week (rather than 6-week) starter kits directly to smokers, based on experiences from New York City and NYTCP-funded Community Partners.

In Exhibit 4-120, we present the percentage of former smokers (successful quitters) or current smokers who have made a quit attempt in the past 12 months and who have used a nicotine patch or nicotine gum. Approximately a quarter of this group has used NRT in the past 12 months. There has been no changes over time in NRT use. In the 2006 IER, we will be able to assess the impact of the Quitline distribution of NRT using data from the Quitline and from the ATS.

## 4.4.7 Are Cessation Outcomes (e.g., Percentage of Smokers Who Have Quit for at Least 6 Months, Number of Quit Attempts, Duration of Longest Quit Attempt) Improving Over Time?

Ultimately, increasing the successful quit rate is a central objective for Goal 3 and the program as a whole. To examine how cessation-related outcomes are changing over time, we explore several measures of quitting. Several theoretical models of smoking cessation describe a process of change in which smokers progress while trying to quit. These models recognize that there is variation among smokers in terms of "readiness" to quit—some are open to quitting and ready to set a quit date, whereas others are seriously planning to quit





in the near future, and still others are not considering making a change at all. It often takes many attempts at quitting before a smoker achieves long-term success, and rarely does cessation occur after one attempt and/or one intervention. According to these models, we might expect to observe changes in smokers' intentions to quit prior to observing changes in actual quitting behavior. Given the model of smoking cessation as a process and the lack of consensus as to the best measure of cessation intentions and behaviors, we present results for multiple cessation outcomes:

- Current smokers who intend to quit in the next 30 days
- Current smokers who have made at least one quit attempt in the past year
- Smokers who are currently quit and have been quit for at least 6 months of the past 12 months

We chose to use intentions to quit in the next 30 days as an indicator of quit intentions rather than a measure of intentions to quit in the next 6 months because of evidence that quit intentions are unstable over time (Hughes et al., 2005). Beginning with smokers' intentions to quit in the next 30 days, we find there is no statistically significant trend over the seven quarters of ATS data (Exhibit 4-121). However, from Q3 2004 to Q1 2005, the percentage of smokers who say they plan to quit in the next 30 days increased (p < 0.02).

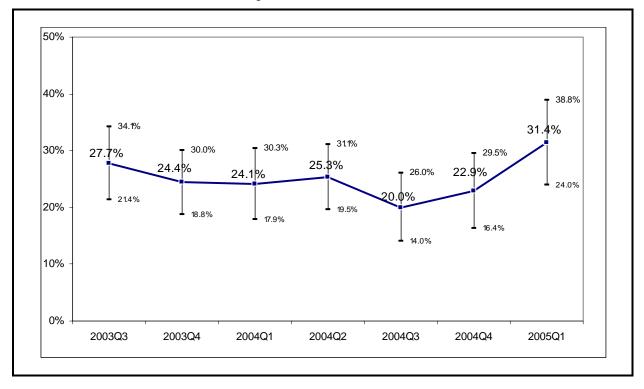


Exhibit 4-121. Percentage of Adult Smokers Who Were Planning to Stop Smoking in the Next 30 Days, ATS Q3 2003–Q1 2005

To explore factors that are correlated with whether a smoker intends to quit, we performed a logistic regression of 30-day quit intentions as a function of age, race/ethnicity, gender, education, monthly cigarette consumption, a time trend, awareness of NYTCP-sponsored SHS and cessation media messages, and an indicator of whether the smoker purchased cigarettes all of the time from any low- or untaxed source. The latter tests whether access to cheap cigarettes discourages quit attempts. This model shows that the odds of intending to quit were twice as high for those who reported seeing NYTCP-sponsored cessation messages as for those who did not (OR = 2.0, p < 0.004). SHS messages were not associated with quit intentions. However, those who reported always purchasing cigarettes from low- or untaxed sources had a decreased odds of intending to quit (OR = 0.66, p < 0.02).

Approximately half of current smokers have made a quit attempt in the past year. (Exhibit 4-122). There is no statistically significant trend in this measure. A logistic regression model similar to the one described above indicates that the odds of making a quit attempt in the past year are 41 percent lower for smokers who always purchased their cigarettes from low- or untaxed sources compared to all other smokers (OR = 0.59, p < 0.001). This regression also showed that recall of NYTCP-sponsored cessation ads was associated with an increased odds of trying to quit (OR = 1.8, p < 0.006).

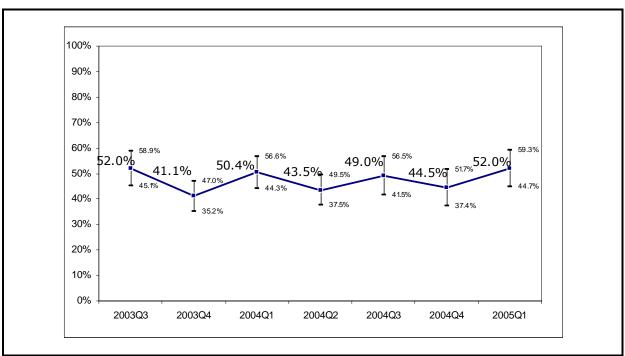


Exhibit 4-122. Percentage of Smokers Who Made a Quit Attempt in the Past 12 Months, ATS Q3 2003–Q1 2005

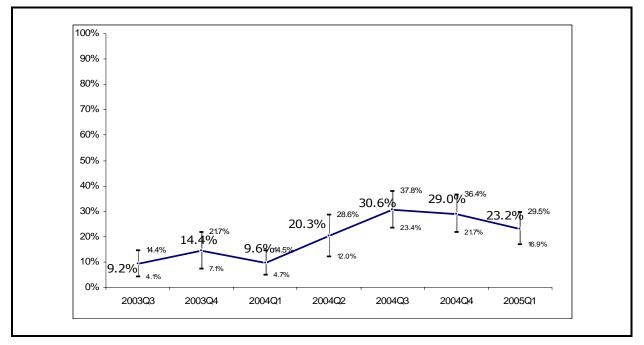
There is a statistically significant increasing trend (Exhibits 4-123) in the percentage of smokers who have quit in the past 12 months and have remained quit for 6 months or more.<sup>5</sup> This measure shows a sharp increase over time—starting at 9 percent in Q3 2003 and peaking at 31 percent 1 year later. While it is difficult to attribute this change to the NYTCP, it does represent a sharp rise that corresponds with the steadily decreasing prevalence of smoking presented earlier. Other cessation outcomes such as the number of quit attempts, the duration of the longest quit attempt, and number of days smoked and cigarettes smoked in the past month showed no statistically significant trends.

## 4.4.8 Summary, Conclusions, and Recommendations

NYTCP has been supporting smokers' efforts to quit since 2000, when the program established the New York State Smokers' Quitline. Since that time, the program has steadily enhanced Quitline services and engaged in other efforts to promote cessation, such as tobacco countermarketing, fostering policy changes (e.g., increases in excise taxes, smoke-free laws and policies), and implementing 19 regional Cessation Centers. Recent enhancements to the Quitline include offering callers a 2-week NRT starter kit (beginning in

<sup>&</sup>lt;sup>5</sup>Percentage of smokers with successful quits = the number of smokers who have quit in the past 12 months and remained quit for more than 6 months / the number of all smokers who have quit in the past 12 months and current smokers who tried to quit in the past 12 months.

#### Exhibit 4-123. Percentage of Smokers Who Made a Successful Quit Attempt in the Past 12 Months (Remained Quit for More Than 6 Months), ATS Q3 2003–Q1 2005



Note: This measure is calculated as the number of smokers who have quit in the past 12 months and remained quit for more than 6 months / the number of all smokers who have quit in the past 12 months and current smokers who tried to quit in the past 12 months.

December 2004) and more actively promoting the Fax-to-Quit program that allows health care providers to refer patients to the Quitline. In addition to changes to the Quitline, the program established 19 Cessation Centers that began work in December 2004. The majority of their effort will focus on promoting the implementation and use of screening and reminder systems at health care provider organizations that prompt providers to conduct the 5As: ask, assess, advise, assist, and arrange. Data from the health care provider organization study and the ATS will provide measures to monitor Cessation Centers' and other Community Partners' progress toward increasing the number of health care provider organizations that have screening systems in place to screen all patients for tobacco use and provide brief advice to quit at every patient visit. Finally, improvements to the media campaign, including messages that encourage smoking cessation, represent another positive programmatic change. A summary of findings for Goal 3 follows.

## Health Care Provider Support for Cessation

- Our study of hospitals and data from the ATS describe the current level of support offered to smokers by health care providers, and both sources highlight significant opportunities for providers to support smokers in their attempts to quit smoking.
- Interviews with hospital administrators indicate that the current status regarding systems and practices to identify and treat patient tobacco use is mixed.

- 40 percent of hospitals have written clinical guidelines or protocols for diagnosing and treating tobacco dependence.
- 51 percent developed their own guidelines rather than using the Public Health Service Guideline for Treating Tobacco Use and Dependence.
- 59 percent of hospitals report that they do not require providers to receive training about tobacco use assessment and treatment.
- The percentage of hospitals that require health care providers to adhere to the "5As" is generally quite low:
  - 87 percent ask new patients if they use tobacco,
  - 39 percent ask existing patients if they use tobacco,
  - 46 percent advise patients to quit,
  - 29 percent assess patients' willingness to quit,
  - 13 percent assist patients willing to quit by offering counseling or NRT, and
  - 24 percent arrange for follow-up contact for those willing to quit.
- Nearly all hospitals have a system in place to cue providers to assess patients' tobacco use, and 70 percent have systems to prompt the provision of advice. Only 20 percent have systems to track the patients' progress.
- Of smokers who visited a health care provider in the past 12 months, 87.0 percent were asked about tobacco use, 69.9 percent were advised to quit, and 38.0 percent were assisted with a quit attempt in 2004.

## Quitline

- Approximately two thirds of smokers had heard of the Quitline as of Q1 2005.
- The percentage of smokers who ever called the Quitline, according to the ATS, fluctuated from 2.5 to 10.1 percent.
- NYTCP-sponsored media messages are correlated with increased awareness of and calls to the Quitline.
- The Quitline began offering 2-week NRT starter kits in December 2004. Although it is too early to assess the impact that the newly available NRT will have on cessationrelated outcomes, experiences from New York City and other NYTCP-funded Community Partners suggest that this approach will be effective and that a 2-week course of NRT shipped directly to smokers is the most cost-effective method of distribution.
- Health care providers can refer their patients to the Quitline using the Fax-to-Quit program, where the Quitline will call the patient to initiate cessation counseling. Referrals from the Fax-to-Quit program to the Quitline began in October 2004 and increased to 16 percent of all referrals by April 2005.

## **Cessation Outcomes**

 Intentions to quit in the next 30 days among current smokers increased from 20 to 31 percent from Q3 2004 to Q1 2005. Recall of NYTCP-sponsored media messages was associated with increased intentions to quit.

- The percentage of current and former smokers who made a quit attempt in the last 12 months and have remained quit for more than 6 months increased from 9 to 31 percent from Q3 2003 to Q3 2004—a sharp increase that corresponds to the downward trend in the prevalence of smoking. However, with the available data, we are not able to definitively attribute these positive trends to program efforts.
- Recall of NYTCP-sponsored cessation messages was associated with increased odds of having intentions to quit and trying to quit.
- Our findings also suggest that smokers' access to low- or untaxed cigarettes is correlated with a lower percentage of smokers making a quit attempt and with decreased intentions to quit.

## **Conclusions and Recommendations**

As noted in the 2004 IER, NYTCP has invested in multiple evidence-based strategies to promote cessation. We also noted then that the program had instituted promising new interventions for cessation—the Cessation Centers and the distribution of NRT starter kits via the Quitline. In addition to these new interventions, NYTCP has also undertaken several other enhancements of existing interventions: the promotion of the Fax-to-Quit program and a more effective media campaign to promote cessation.

At this stage of the evaluation, it is still too early to know what impact these enhancements and new interventions will have; however, it is important to note that these strategies are evidence-based and thus represent wise choices by the program, given the limited resources that are available. The Cessation Centers' efforts are squarely focused on promoting systems to screen all patients for tobacco use and provide brief advice to quit at all visits; if successful, we will observe changes in the baseline indicators reported above.

It is also too soon to fully assess the impact that NRT starter kits recently made available via the Quitline will have on cessation-related outcomes. However, ATS data suggest that smokers' use of NRTs has remained stable over time at around 25 percent of smokers who tried to quit in the past 12 months. The experience from New York City's and NYTCP-funded Community Partners' NRT giveaway suggests that this new feature of the Quitline will increase the quit success rate among Quitline callers who use NRT. Miller et al.'s (2005) study on New York City's NRT giveaway concluded that at least 6,038 successful quit attempts (out of 34,090 eligible callers to the Quitline) were attributable to NRT distributed by the City's Department of Health and Mental Hygiene.

We were able to assess short-term cessation outcomes that potentially respond to a program's mass media efforts. The available data strongly suggest that mass media efforts, while active, support cessation by motivating smokers to make a quit attempt and by increasing awareness and use of the Quitline. Our findings that mass media drives smokers to the Quitline is not surprising given that evidence from other studies has suggested a relationship between media promotion of Quitlines and call volume (Pizacani et al., 2002). Assuming that Quitlines do improve cessation outcomes (see Rabius et al. [2004] and Zhu

et al. [2002] for evidence of effectiveness of Quitlines), then these results suggest the importance of a media campaign for meeting the goal of promoting cessation.

Awareness of media messages was also associated with increased intentions to quit in the next 30 days and quit attempts in the past 12 months. The absence of a correlation between media and long-term measures of success may be related to the fact that the media have been dormant for long stretches of time in the past. The time period when the mass media have been dormant have negatively affected steady progress toward achieving stated program objectives, notably awareness and use of the Quitline.

Overall, the program has a comprehensive plan and set of programs to support smoking cessation. These choices are evidence-based, and thus represent wise investments of program resources. Moving forward, we urge the program to consistently air effective antismoking television commercials to actively promote cessation and the Quitline and to complement the other activities in support of cessation. Our findings also suggest that smokers' access to low- or untaxed cigarettes is correlated with a lower percentage of smokers making quit attempts and with decreased intentions to quit. Although these findings are not conclusive, they provide additional evidence that these sources of low-price cigarettes may negatively affect the program's ability to meet its objectives.

# 4.5 Goal 4: Prevent the Initiation of Tobacco Use Among Youth and Young Adults

## 4.5.1 Overview

Goal 4 of the NYTCP is to prevent the initiation of tobacco use among youth and young adults. As described in the NYTCP Draft Strategic Plan, the objectives identified to achieve this goal include increasing the unit price of cigarettes through increases in statewide and local cigarette excise taxes; increasing the number of jurisdictions that levy their own cigarette excise taxes; increasing the percentage of adults who support limiting smoking in movies; decreasing the number of movies rated G, PG, and PG-13 that contain smoking or tobacco placement; and increasing the number of jurisdictions with a high youth access law compliance rate. As noted elsewhere, we address smoking in the movies primarily under Goal 2. In the 2004 IER, RTI found that, as of 2002, youth in New York were similar to youth in the rest of the United States in terms of smoking, access to tobacco, exposure to school and community tobacco prevention programs, and awareness of antismoking the first 2 years of the program. These results were consistent with expectations, given the amount of time required to build effective capacity to generate behavioral changes among youth and the amount of funding available to the program.

In this section, we assess NYTCP's progress toward achieving the Goal 4 objectives by presenting more recent data on youth smoking and factors that may be associated with

youth smoking. This section is organized around a series of evaluation questions that address NYTCP's programmatic activities with respect to Goal 4 initiatives, consistency of implementation with respect to the Strategic Plan, and evaluation data to assess progress toward achieving the objectives of Goal 4. We address the following specific evaluation questions in this section:

- 1. What programmatic activities are being implemented in support of Goal 4?
- 2. How do changes in adult smoking influence youth smoking?
- 3. How have recent changes in cigarette taxes affected youth smoking rates in New York, and have low-price alternatives weakened the effects of taxes on youth smoking?
- 4. Are illegal sales to minors decreasing, and are restrictions on tobacco influencing youth smoking rates?

To address each of these evaluation questions, we analyzed a variety of data sources. We addressed evaluation Question 1 using data from the CAT system, which demonstrates the NYTCP's relative emphasis on all Goal 4 activities. We addressed evaluation Questions 2 through 4 using data primarily from the 2000, 2002, and 2004 YTS in addition to other supplemental data sources, such as county-level tax evasion propensities derived from the New York ATS. These data sources are described in greater detail in Chapter 3.

## 4.5.2 Summary of Activities in Support of Goal 4?

NYTCP's overall programmatic approach to effecting change in youth and young adult smoking behavior may be described as a social norms approach that seeks to influence community and adult norms, which then affect youth smoking behavior. Central to this approach is the acknowledgment that youth and young adult smoking occurs within a social, family, and community context. These contextual dimensions are focal points of other NYTCP goals and objectives as outlined in the Strategic Plan. NYTCP's approach to preventing initiation is thus guided by a programmatic philosophy that most initiatives undertaken by NYTCP in every other goal area are expected to have an impact on smoking initiation among youth and young adults. For example, eliminating exposure to SHS (Goal 1), decreasing the social acceptability of tobacco use (Goal 2), and promoting smoking cessation (Goal 3) are expected to reduce adult smoking rates, encourage the adoption of negative attitudes toward tobacco, denormalize tobacco use among adults, and contribute to the prevention of smoking initiation among youth and young adults.

Programmatic activities undertaken by NYTCP to prevent initiation among youth and young adults include raising the price of cigarettes, changing state tobacco control policies and laws, engaging in community mobilization efforts, promoting smoke-free movies, and promoting effective tobacco-free school policies. These activities are cross-cutting initiatives intended to promote progress toward achieving programmatic goals, including initiation of

tobacco use by youth and young adults. Below, we describe a selection of program activities in support of Goal 4.

**Enforcement of Youth Access Laws**. ATUPA requires retailers to obtain proof that any individual purchasing cigarettes is 18 or older and also limits the location of vending machines, the placement of tobacco products within retail outlets, and the venues in which free tobacco products can be distributed. Like many NYTCP activities, enforcement of ATUPA is primarily a community function, accomplished, in this case, through contracts with local health departments. In counties without full-service local health departments, NYSDOH performs ATUPA enforcement. The retailer compliance checking system is funded through a separate state appropriation of approximately \$2.5 million, while CEH receives an additional \$4.6 million from the NYTCP appropriation. CEH also receives approximately 75 percent of the administrative appropriation that NYTCP receives.

**Community Mobilization**. NYTCP community mobilization efforts in support of Goal 4 include educating community members and leaders, youth and young adults, theater owners, and decision makers about the impact of smoking in movies on youth and young adult tobacco use. These efforts also include educating community members about the preventive effects of counterindustry advertising in movie theaters, the role of increased prices in deterring tobacco use, and the rigorous enforcement of youth access laws and other provisions of ATUPA. These community mobilization efforts are implemented through a variety of mechanisms that include paid and earned media campaigns, public relations and media advocacy, community events, presentations and meetings with community groups, and legislative office visits. In addition to supporting specific objectives across all goal areas, community mobilization activities support the objectives of Goal 4 by promoting negative attitudes and social norms toward tobacco use at the community level, which in turn are expected to discourage smoking initiation among youth and young adults in New York.

**Promotion of Smoke-Free Movies.** One of the primary objectives of Goal 4 in the revised Strategic Plan is to eliminate smoking imagery and tobacco product placement in movies rated G, PG, and PG-13. A key element of the program's activities to promote smoke-free movies is the use of movie slide advertising campaigns, letter writing, petitions, press events, and community resolutions, as well as strategic work with PTAs to increase awareness among community members of the harmful effects of smoking imagery in movies and pressure the motion picture industry and the MPAA to change the rating system to better protect youth younger than age 17 from the harmful effects. In addition to movie slide advertising, NYTCP also promotes smoke-free movies through Reality Check Youth Action Partners, which conduct a number of activities of Reality Check Youth Action Partners are described in greater detail in Section 4.3 (Goal 2). NYTCP also promotes smoke-free movies the ration promotes smoke-free movies smoke-free movies through Reality Check Youth Action Partners are described in greater detail in Section 4.3 (Goal 2). NYTCP also promotes smoke-free movies through promotes smoke-free movies through Partners information

dissemination at film festivals through ads, sponsorships, and other activities; and running traditional media campaigns, including outdoor media on bus sides.

## Implementation of Goal 4 Initiatives

The current strategic focus of Goal 4 activities is increasing the price of cigarettes, promoting smoke-free movies, and enforcing ATUPA provisions. Although statewide and city tax increases may have influenced youth and young adult smoking rates (which we analyze later in this chapter), fewer activities are aimed at achieving Goal 4 objectives, compared with other programmatic goals. To provide a sense of the relative emphasis on Goal 4 objectives and activities in support of those objectives, we summarized the total number of strategies logged into Community Partner annual work plans, through the CAT system for each of the Goal 4 objectives identified in the Strategic Plan (Exhibit 4-124). A strategy is defined as any activity or group of activities associated with one specific goal, objective, or focus area. This can include a single event, a campaign, or several related activities.

The data shown in Exhibit 4-124 suggest that the program's emphasis on statewide Community Partner activities aimed at Goal 4 is relatively low, consistent with programmatic philosophy. During fiscal year 2004–2005, a total of 89 strategies in support of Goal 4 were documented in the CAT system by all partners combined, constituting only 5 percent of all strategies documented by partners. Among these, most activities were conducted by Reality Check Youth Action Partners and focused on promoting smoke-free movies (as would be expected given the programmatic emphasis). Youth activities to promote smoke-free movies included petitions to Hollywood studios, letter writing campaigns, paid media, and recruitment events. In addition to youth partner activities, a total of five paid media purchases related to preventing youth smoking initiation were made between January and May 2005, constituting 1 percent of all NYTCP paid media across each of the goal areas. It should be noted that the strategies listed in the CAT system are not weighted by the amount of funding or cost associated with them. Strategies may also have timelines ranging from 1 month to the entire fiscal year.

## 4.5.3 How Do Changes in Adult Smoking Influence Youth Smoking?

As noted above, NYTCP takes a social norms approach to changing youth and young adult smoking behavior that seeks to influence community and adult norms and behaviors, which then affect youth smoking behavior. We reported in our cross-cutting findings that the prevalence of smoking among middle school and high school students in New York declined significantly between 2000 and 2004 and that, among middle school students, these declines appeared to be greater than those observed in the United States as a whole. However, assessing the impact of NYTCP programmatic activities on youth smoking in New York is difficult because of the inherent time lags of behavior change that result under a social norms strategy.

Objective	Cessation Centers	Community Partnerships	Reality Check Youth Action Partners	Joint Partner Strategies	Total
Increase the unit price of cigarettes sold in New York State	0 0%	0 0%	7 9%	0 0%	7 8%
Increase percentage of adults who agree that movies rated G, PG, and PG-13 should not show actors smoking	0 0%	5 56%	36 46%	2 100%	43 48%
Increase number of jurisdictions with 5 percent or less illegal sales rate to minors	0 0%	1 11%	9 12%	0 0%	10 11%
Increase number of jurisdictions that levy their own cigarette excise taxes and increase the amount	0 0%	0 0%	2 3%	0 0%	2 2%
Decrease number of movies rated G, PG, and PG-13 that contain smoking or tobacco product placement	0 0%	3 33%	24 31%	0 0%	27 30%
Total	0	9 100%	78 100%	2 100%	89 100%

#### Exhibit 4-124. Number of Planned Community Activities in Support of Goal 4 for Fiscal Year 2004–2005, CAT System

One approach to assessing the merits of the program's overall philosophy toward prevention of youth initiation is to estimate how recent state-level youth smoking rates are correlated with past changes in adult smoking rates. To assess the possibility that changes in adult smoking rates can influence changes in youth smoking rates, we used data from the 2001-2002 Current Population Survey (CPS) to estimate the association between the prevalence of smoking among 15- to 17-year-olds and past changes in state-level adult smoking rates. This analysis was performed using a series of multivariate logistic regressions in which we estimated youth smoking in 2001 and 2002 as a function of state-level percentage declines in adult smoking between the 1995/1996 and 2001/2002 waves of the CPS. These models were estimated with a comprehensive set of control variables, including cigarette prices, state-level per capita funding for tobacco control programs, age, gender, race/ethnicity, income, education, labor force status, and an indicator for whether smoking behavior was given by proxy from the respondent's parent or from the respondent themselves. The findings suggest that prior state-level declines in adult smoking are associated with significantly lower current rates of youth smoking. Because funding for tobacco control contributes to declines in adult smoking rates, we also estimated our models excluding this

variable. As expected, the relationship between changes in adult smoking and current youth smoking increased in magnitude.

Based on predicted values given by the logistic regression coefficients, these models suggest that doubling the 6-year rate of decline in adult smoking (from 10.6 percent to 21.2 percent) would lead to an approximate 1 percentage point or 14 percent overall reduction in youth smoking. These data suggest that changes in adult smoking rates in New York will influence future changes in youth smoking rates. Thus, a social norms approach to changing youth smoking behavior by targeting adult and community norms and behaviors appears to be an appropriate strategy for youth prevention, given limited resources.

## 4.5.4 How Have Recent Changes in Cigarette Taxes Affected Youth Smoking Rates in New York, and Have Low Price Alternatives Weakened the Effects of Taxes on Youth?

One of NYTCP's central strategies for reducing the prevalence of smoking among adults and youth is advocating for increases in state and local cigarette excise taxes as a means to raise the unit prices of cigarettes. Empirical evidence suggests that tax/price increases not only help prevent youth smoking (Chaloupka, Tauras, and Grossman, 2000) but may also prevent escalation to regular smoking and promote cessation among youth (Emery, White, and Pierce, 2001; Nonnemaker, 2002) and young adults (Tauras, 2004). Since 2000, cigarette excise taxes have increased twice in New York State and three times in New York City:

- March 2000: \$0.56 to \$1.11 per pack, statewide
- April 2002: \$1.11 to \$1.50 per pack, statewide
- July 2002: \$0.08 to \$1.50 per pack, New York City, for a combined state and local tax of \$3.00

In this section, we present a series of multivariate and descriptive analyses to assess the extent to which these increases in cigarette taxes have influenced youth smoking rates over time.

Our analyses also consider the potential effects of access to low-price sources of cigarettes within New York, such as American Indian reservations. Although cigarette tax increases may reduce smoking rates, the tax increases may also give rise to greater incentives to obtain cigarettes through lower price alternative sources, such as "informal" sales from independent or "street" vendors and untaxed sales on reservations. As we noted in Section 4.1, the percentage of smokers purchasing cigarettes from low-price sources within New York, including reservations, has remained extremely high since 2003. Descriptive data from the YTS show that overall youth smoking prevalence is significantly higher in areas of New York that have a higher potential for cigarette tax evasion. Exhibit 4-125 shows overall youth smoking prevalence in the pooled 2000 to 2004 YTS, stratified by low and medium or

County-Level Tax Evasion Propensity	Prevalence of Youth Smoking [95 percent Confidence Interval]
Low	13.6% [11.9, 15.2]
Medium or High	19.1% [13.5, 24.6]

#### Exhibit 4-125. Prevalence of Any Past 30-Day Smoking Among Youth by County-Level Adult Propensity to Purchase Cigarettes from American Indian Reservations, YTS 2000–2004

high county-level propensities to purchase cigarettes from low-price sources. The stratification presented in this exhibit is based on county-level ATS estimates among adult smokers of the prevalence of purchasing cigarettes from low-price alternative sources.

Exhibit 4-125 shows that overall youth smoking prevalence was 13.6 percent in areas of low tax avoidance compared to 19.1 percent in areas of medium or high tax avoidance. This difference was not statistically significant at the 5 percent level but was significant at the 10 percent level. These data suggest that smoking prevalence may be generally higher in geographic areas that are vulnerable to greater levels of cigarette tax evasion. However, these patterns may also indicate how each of these areas differs by characteristics other than the propensity to evade cigarette taxes. For example, areas with higher potential for tax evasion propensity are more likely to be located near Indian reservations but may also be more rural, white, less educated, and less affluent, all factors associated with higher rates of youth smoking. As we show below, when other factors are controlled for in multivariate analysis, the association between the prevalence of tax evasion and youth smoking remains.

To more closely examine the association between cigarette tax increases and youth smoking in New York and the extent to which the effects of tax increases may be moderated by the potential for tax evasion, we estimated a series of multivariate regressions using data from the YTS. Our models estimate the probability that a youth smokes as a function of tax increases and the relative availability of low-price alternative sources of cigarettes. To account for accessibility to low-price alternative sources of cigarettes, we merged countylevel ATS estimates of the prevalence of purchasing cigarettes through low-price sources to the 2000, 2002, and 2004 YTS. These measures include the following county-level prevalence estimates from the ATS:

- Prevalence of any cigarette purchasing from Indian reservations
- Prevalence of purchasing cigarettes *all of the time* from any low-price source, including American Indian reservations, duty-free shops, toll-free numbers, out-ofstate locations, and the Internet

 Prevalence of purchasing cigarettes all or some of the time from any low-price source, including reservations, duty-free shops, toll-free numbers, out-of-state locations, and the Internet

Each model we estimated controlled for age, race/ethnicity, income, and whether youth live in a household with a smoker. We also controlled for declines in youth smoking over time that are not attributable to taxes or other variables. Finally, we controlled for tobacco retail outlet density within each county in the YTS.

Given the existence of additional cigarette excise taxes in New York City, as well as other differential characteristics between New York City and the rest of the state, it is logical to estimate each model separately among youth in New York City and youth in the rest of the state. However, the YTS data do not provide adequate representation of New York City youth to permit such analysis, and thus we limit our analyses to the remainder of New York State.

Odds ratios from our models of the association between excise taxes and smoking are shown in Exhibit 4-126. We estimated three models, each with a different control variable for cigarette tax evasion. Model 1 shows the odds ratio between cigarette excise taxes and the likelihood of smoking, where county-level tax evasion is controlled for using the county-level prevalence of purchasing cigarettes from Native American reservations. Models 2 and 3 control for tax avoidance by including county-level variables that measure the frequency of purchasing cigarettes from low-tax sources. All models are limited to counties outside New York City (N=12,771). Because the odds ratios on cigarette taxes are significantly less than one, these findings indicate that increases in cigarette excise taxes over time are associated with significantly lower rates of youth smoking prevalence in areas of the state outside of New York City.

Although tax increases appear to have had a negative effect on youth smoking in areas of the state outside of New York City, access to low-price alternative sources of cigarettes may dampen the impact of taxes. To examine this possibility, we re-estimated the above models separately among regions in New York (outside of New York City) with a low propensity for tax evasion and among regions with medium or high propensities for tax evasion. These models allow us to assess whether the effects of taxes are different in each of these areas.

Exhibit 4-127 shows results from multivariate models stratified by high and low potential for cigarette tax evasion. With the exception of our model stratified by purchasing "all or some of the time" from low-tax sources, the odds ratios for the association between taxes and youth smoking are generally larger for areas that have a high potential for tax evasion. These findings suggest that taxes may have less of an effect on youth smoking in these areas (i.e., the negative effect of taxes is smaller in areas of high tax evasion). Given the size of the differences by areas of low and high tax evasion and the consistency of these differences across various measures of tax evasion propensity, additional data sources may be needed to more rigorously investigate the impact of low-price sources of cigarettes.

	Model 1	Model 2	Model 3
Explanatory Variable	Any Purchasing at Indian reservations	Purchasing "All the Time" at Any Low-Tax Source	Purchasing "All or Some of the Time" at Any Low-Tax Source
Cigarette Excise Tax	0.13**	0.12**	0.12**
	[0.05, 0.33]	[0.05, 0.31]	[0.04, 0.31]
County-Level Tax	1.22	1.68*	1.34
Evasion Propensity	[0.83, 1.79]	[1.01, 2.81]	[0.87, 2.07]

#### Exhibit 4-126. Logistic Regression Models Showing the Odds (Odds Ratios and 95 Percent Confidence Intervals) of Smoking as a Function of Taxes and County-Level Tax Evasion Propensities, YTS 2000–2004

Note: *Model 1*: Tax evasion propensity defined as county-level prevalence of any cigarette purchasing from Native American reservations. *Model 2*: Tax evasion propensity defined as county-level prevalence of purchasing cigarettes "all the time" from any low-tax source. *Model 3*: Tax evasion propensity defined as county-level prevalence of purchasing cigarettes "all the time" from any low-tax source. *Model 3*: Tax evasion propensity defined as county-level prevalence of purchasing cigarettes "all the time" from any low-tax source. *Model 3*: Tax evasion propensity defined as county-level prevalence of purchasing cigarettes "all the time or sometimes" from any low-tax source. All models include control variables for county-level tobacco retail outlet density, age, gender, race/ethnicity, income, presence of a household smoker, and a linear time trend.

\* Significant at p < 0.05.

\*\* Significant at p < 0.01.

#### Exhibit 4-127. Logistic Regression Models Showing the Odds of Smoking as a Function of Taxes, by County-level Tax Evasion Propensities, YTS 2000–2004 (Area Outside New York City)

County-level Tax Evasion Propensity	Tax Odds Ratio
Any Purchasing at Indian Reservations	
Low	0.09** [0.03, 0.24]
Medium or high	0.21** [0.05, 0.87]
Purchasing All of the Time at any One of Five Low-Price Sources <sup>a</sup>	
Low	0.10** [0.03, 0.29]
Medium or high	0.15* [0.03, 0.69]
Purchasing All or Some of the Time at any One of Five Low-Price Sources <sup>a</sup>	
Low	0.14* [0.02, 0.84]
Medium or high	0.12** [0.03, 0.45]

<sup>a</sup>Includes American Indian reservations, duty-free shops, toll-free numbers, out-of-state locations, and the Internet.

## 4.5.5 Are Illegal Sales to Minors Decreasing, and Are Restrictions on Access to Tobacco Influencing Youth Smoking Rates?

Enforcement of tobacco sales to minors is a significant component of CDC's *Best Practices for Tobacco Control*, which recommends that New York fund this program at a minimum of approximately \$8 million per year. Although this is not an evidence-based intervention recommended by the Task Force on Community Preventive Services, a considerable amount of state resources is committed to enforcing ATUPA. ATUPA requires tobacco retailers to obtain positive proof that anyone purchasing cigarettes is age 18 or older. ATUPA also limits the location of tobacco vending machines and the placement of tobacco products within retail stores. NYTCP seeks to improve compliance with ATUPA by tobacco retailers through regular compliance inspections conducted by state and local sanitarians, with the assistance of underage youth who attempt to purchase tobacco products.

In the 2004 IER, we reported that retailer noncompliance rates were cut nearly in half to 10 percent since 1997 when ATUPA was first amended to fund enforcement activities and strengthen penalties for retailers who sell cigarettes to underage youth. However, as of 2002, we found that New York youth were no more likely than youth in the rest of the United States to be asked for proof of age while purchasing cigarettes or to be refused cigarettes because of age (according to self-reports of youth who buy cigarettes). Exhibit 4-128 shows historical data on vendor noncompliance in New York. Since 2000, retailer noncompliance rates have remained relatively stable.

Program Year	Noncompliance Rate	Number of Jurisdictions Out of 44 with 5 Percent or Less Noncompliance Rate
1997–1998	19.5%	15
1998-1999	17.1%	12
1999-2000	12.1%	14
2000-2001	9.2% (10.6%)	25 (19)
2001-2002	10.1% (10.4%)	27 (26)
2002-2003	7.3% (11.3%)	23 (21)
2003-2004	10.6% (11.2%)	29 (25)

## Exhibit 4-128. Statewide Vendor Noncompliance Rate

Note: Rates are based on total enforcement actions, except for values in parentheses, which are based on sales to minors specifically. Sales to minors are reported beginning in the 2000–2001 federal fiscal year.

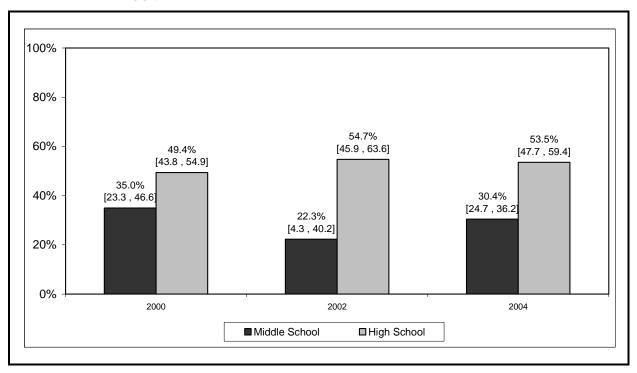
The number of jurisdictions with 5 percent or less noncompliance increased from 19 in 2000–2001 to 25 in 2003–2004.

Data from the YTS suggest that, since 2002, enforcement has not significantly limited access to cigarettes among middle and high school students. Exhibits 4-129 and 4-130 show trends in the percentage of middle and high school students who were asked to show proof of age when purchasing cigarettes or were refused sale of cigarettes because of their age. The data presented in these exhibits are limited to youth who attempted to purchase cigarettes in a store during the past 30 days (N=2,715). The percentage of middle school students who were asked to show proof of age increased from 22.3 to 30.4 percent from 2002 to 2004, while the percentage that were refused sale increased from 30.2 to 39.8 percent during that time. However, neither of these changes is statistically significant. Trends in self-reported access to cigarettes in stores are relatively flat among high school students.

Data from the YTS also suggest that younger youth purchase cigarettes from nonretail outlets much more frequently than older youth. Exhibits 4-131 and 4-132 show the percentage of middle school and high school students who usually purchase their cigarettes by the pack, loose, and from independent sellers within New York City and outside of the city during the past 12 months. These data show that the percentage of youth smokers who purchase cigarettes loose is significantly higher among middle school students than among high school students. Furthermore, the prevalence of purchasing cigarettes loose is significantly higher among all youth smokers in New York City than among youth smokers in the rest of the state, which may reflect greater opportunities to purchase loose cigarettes, such as from independent sellers, and/or greater retail outlet density.

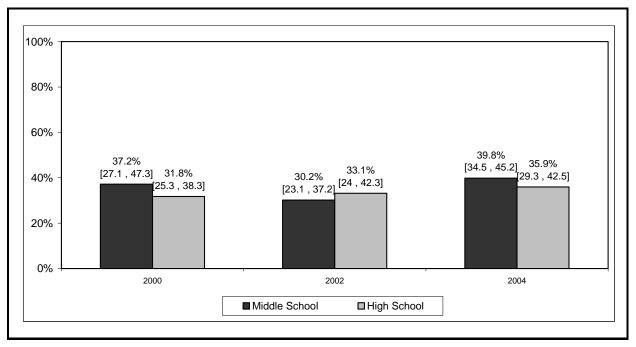
## 4.5.6 Summary, Conclusions, and Recommendations

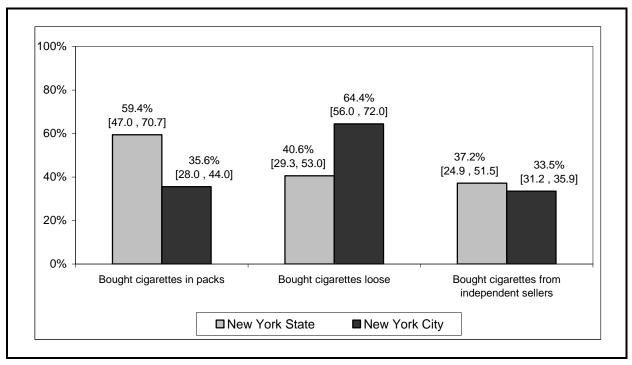
The linkage between specific programmatic activities and corresponding intermediate- and long-term outcomes is more complex for Goal 4 than for other programmatic objectives. This complexity arises from a cross-cutting approach of influencing youth smoking through preceding changes in adult behaviors and community norms, brought about by programmatic activities conducted in support of all other goal areas. Adding to this complexity are the inherent time lags involved in observing changes in youth smoking behaviors that follow from preceding changes in adult smoking behaviors and norms. As a result, drawing more definitive conclusions about the program's direct impact on youth smoking is relatively more difficult. Despite these complexities, we nevertheless observe significant declines in youth smoking among both middle school and high school students in New York since 2000. Although analyses of CPS data suggest that changes in adult smoking are indeed correlated with youth smoking prevalence at the national level, further data are needed to draw this conclusion within specific states.

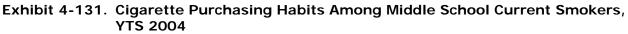


#### Exhibit 4-129. Percentage of Middle and High School Students Who Have Been Asked for Proof of Age When Purchasing Cigarettes, YTS 2000– 2004

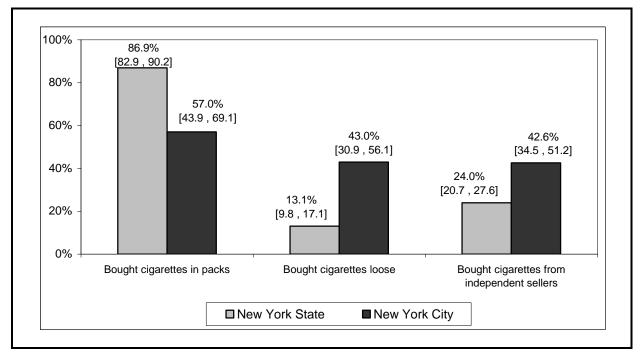
#### Exhibit 4-130. Percentage of Middle and High School Students Who Have Been Refused Sale of Cigarettes Because of Age, YTS 2000–2004







#### Exhibit 4-132. Cigarette Purchasing Habits Among High School Current Smokers, YTS 2004



It is worth noting, however, that the program's approach to youth smoking prevention, through changes in adult norms and behaviors, may ultimately generate more permanent changes in youth smoking. Changes that occur as part of a larger societal shift in norms and attitudes may be more stable. Rapid shifts in youth smoking behavior could just as rapidly shift in the opposite direction, once support for the behavior change (e.g., expensive media campaigns) is removed. Reductions in youth smoking that occur independent of reductions in adult smoking may, therefore, be vulnerable. Thus, sustaining long-term reductions in adult smoking prevalence may be a prudent investment to prevent and reduce youth tobacco use.

Moving forward, our evaluation of the program's efforts to prevent youth smoking will continue to focus on the association between youth smoking and program initiatives that cut across other goal areas to the extent that these initiatives are measurable for youth. Below, we summarize the main Goal 4 findings and recommend future steps.

## Youth Smoking

- Declines in youth smoking were associated with tax increases that occurred in New York between 2000 and 2004 in areas outside of New York City.
- The county-level cigarette tax avoidance appears to be associated with higher rates of youth smoking.
  - The effects of tax increases on youth smoking appear to be weaker in areas of the state where the intensity of cigarette tax evasion is higher.
- We validated NYTCP's social norms approach to decreasing youth smoking by demonstrating that declines in adult smoking are followed by lower rates of youth smoking.

## Youth Access

- Compliance with youth access laws in New York has not significantly increased since the 2004 IER.
  - Vendor noncompliance rates dipped noticeably to 7.3 percent in 2002–2003 but rebounded to 10.6 percent in 2003–2004.
- The percentage of youth smokers who purchase cigarettes loose is significantly higher among middle school students than among high school students.
  - The prevalence of purchasing cigarettes loose is significantly higher among all youth smokers in New York City than among youth smokers in the remainder of the state.

Our evidence suggests that, although declines in adult smoking will lead to declines in youth smoking, this process may take years to yield detectable effects on youth smoking rates in New York, given the magnitude of change required in adult smoking and the time required to achieve this change. Speeding declines in youth smoking would require greater investment (which is not currently available) in youth-targeted interventions such as mass

media campaigns that have been shown to have a more direct and immediate influence on youth smoking.

At this time, we do not recommend any changes to NYTCP's approach to reducing youth and young adult smoking. We do recommend that the program incorporate more specific intermediate indicators of success for youth prevention in the Strategic Plan. Some examples might include youth-specific attitudes, perceptions, and social norms that are expected to precede changes in tobacco use.

## 5. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The New York Tobacco Control Program (NYTCP) has implemented significant new programmatic activities and improvements since the 2004 Independent Evaluation Report (IER). In the current report, we find that the prevalence of smoking among youth and adults has declined faster in New York than in the United States as a whole, suggesting that programmatic activities, combined with significant policy changes, have accelerated these trends. From 2003 to 2004, the percentage of adults who smoke dropped from 20.8 to 18.1 percent, a relative decline of 13 percent, representing 300,000 fewer adult smokers in New York. Other key programmatic outcomes have also improved. The percentage of smokers and former smokers who have quit in the past 12 months and have remained quit for at least 6 months has increased significantly, the use of tobacco products other than cigarettes has declined among youth and adults.

These shifts in programmatic outcomes are likely the result of the accumulation of sustained tobacco control interventions and shifts in norms related to tobacco use in New York and across the United States. Although it is difficult to definitively link improvements in these outcomes to programmatic activities because of the challenges inherent in the evaluation of a comprehensive program in a changing tobacco control policy environment, we can point to important programmatic changes that have been implemented since the 2004 IER that have had a measurable impact on program outcomes. In other cases, it is premature to assess the effect that programmatic enhancements have had because they have only recently been implemented.

## 5.1 Responses to 2004 IER and Additional Recommendations

Key findings and recommendations from the 2004 IER include the following:

- New Yorkers are exposed to an estimated \$830 million in annual tobacco advertising and promotion, which far exceeds tobacco control funding in the state. As a result, we recommended that the program increase its efforts to combat this influence.
- Of those who visited a health care provider, less than two thirds of smokers reported being advised to quit by their health care provider (90 percent screened, 70 percent advised = 63 percent asked and advised).
- Less than a quarter of smokers reported using nicotine replacement therapy (NRT) as a cessation strategy.
- Efforts to eliminate SHS should increasingly focus on promoting smoke-free homes and cars in light of enactment of the Clean Indoor Air Act (CIAA).
- Mass media efforts were dormant for a 6-month period, during which the CIAAA was implemented—a missed opportunity to coordinate media with a historic policy change.

- Countermarketing messages too often lacked strong emotional content that has been shown to be effective.
- Media was not coordinated with other programmatic interventions, consistent with the evidence base that shows that mass media with other interventions is an effective strategy.
- A significant percentage of smokers had misperceptions about the benefits of low-tar cigarettes and the dangers of nicotine.

To address the first point above, the program developed and implemented a new statewide initiative to combat the influence of tobacco advertising, sponsorships, and promotions and growing expenditures on tobacco marketing. Interventions are targeted at reducing advertising in the retail environment, magazines, and newspapers; smoking in movies rated G, PG, and PG-13; and tobacco promotions and sponsorships in the community.

The next two points are addressed by expanded cessation-related activities, including the establishment of 19 Cessation Centers that will focus on increasing the number of health care provider organizations that have systems to screen patients for tobacco use and provide brief advice to quit to all patients who use tobacco. Enhancements to the Quitline include the Fax-to-Quit health care provider referral program and the distribution of free NRT starter kits to eligible Quitline callers.

Because these improvements have been relatively recent, we cannot assess their impact. However, it is important to note that all of these interventions are rooted in evidence-based strategies with one exception. Although the Advertising, Sponsorship, and Promotion (ASP) initiative responds to tobacco marketing and the glamorization of smoking in the movies that have been shown to encourage smoking, there are no published studies that demonstrate the effectiveness of these interventions. However, early anecdotes point to their potential. In addition, the implementation of ASP statewide comes at an appropriate time. In the wake of implementation of the CIAA, Community Partners may have needed guidance to redirect their efforts away from the promotion of smoke-free laws. In fact, our community case study found that Community Partnerships are more productive and able to actively involve volunteers when they are focused on a specific initiative. The ASP initiative can provide this focus following the CIAA, and our impression from Community Partners is that they are enthusiastic about working to combat the influence of tobacco marketing.

Since the 2004 IER, there has been no progress in the percentage of smokers who report that their home and cars are smoke-free, which has remained stable at approximately 30 percent. In the current report, we also found that mass media messages to date are not correlated with increased adoption of these voluntary policies. Although this may be a consequence of gaps in consistently airing mass media, it may also indicate that the choice of media messages and other strategies to promote smoke-free homes and cars needs to be reconsidered. However, the current evidence base does not provide much guidance about

the most effective strategies for promoting smoke-free homes and cars. We recommend reviewing current strategies used by the program and exploring alternative strategies that may help lead to improvements in this key program objective.

Finally, with respect to countermarketing efforts, the program has made a number of positive changes in response to the 2004 IER. The choice of television advertisements has improved markedly, and our findings indicate that the changes have had an impact on a range of outcomes:

- Awareness of any NYTCP-sponsored media messages increased over time from 13 percent in Q3 2003 to 33 percent in Q2 2004 to 41 percent in Q1 2005; when statewide media was off the air, awareness dropped to 5 percent, reflecting awareness of Community Partner-run ads.
- Reactions are more favorable to "high" impact ads than to "low" impact ads. Specifically, 94 percent of New Yorkers who saw at least one NYTCP-sponsored "high" impact SHS ad agreed that the ad "said something important" to them compared to 75 percent for "low" impact ads. The corresponding statistics for "high" and "low" impact cessation ads are 91 and 81 percent, respectively.
- Knowledge of SHS as a risk factor for heart disease and lung cancer was higher for smokers who recalled NYTCP advertisements.
- Recall of advertisements was not correlated with the adoption of smoke-free home or car policies.
- Smokers' perceptions of the health risks of smoking on heart attacks was higher for those who recalled NYTCP tobacco control ads.
- Exposure to tobacco control ads was associated with increased awareness of the Quitline and greater calls to the Quitline.
- Awareness of ads was associated with intentions to quit smoking in the next 30 days but not associated with a quit attempt or the likelihood of maintaining a quit attempt for 6 months or longer.

Despite these improvements and impacts, a 6-month gap when no media messages were aired negatively affected awareness and may explain why there was not a more consistent influence on important programmatic outcomes. In addition, although the program increased awareness of media messages, the level of awareness fell short of our recommendation to reach 60 percent of the population. In light of the choices of media messages, this shortfall is likely the result of limited resources. We did find that when a local Community Partnership aired effective messages in combination with state ads, overall awareness reached 59 percent. Although this illustrates the potential for the program to reach the recommended target, there are media markets in the state where the cost of television advertising requires additional resources. Moving forward, the program should consistently air countermarketing messages using a significant proportion of "high" impact ads, at a dollar investment sufficient to achieve 60 percent awareness.

In summary, the program has performed admirably given its available resources and responded thoroughly to most of the recommendations outlined in the 2004 IER. The program has undertaken major initiatives in the past year that have required significant investments of time and energy to implement successfully.

Several years ago, the program developed a strategic plan and a vision for developing a program based on evidence-based strategies. With the recent expansion of program activities and the upcoming tobacco-free school and promising practices initiatives, the vision is nearly fulfilled. If the program is to further expand its activities and ability to expose New Yorkers to greater levels of evidence-based strategies, it will require additional resources. At this time, if additional resources become available, we recommend that NYTCP increase investment in countermarketing to ensure that at least 60 percent of New Yorkers are consistently exposed to countermarketing messages. In addition, we recommend expanding the Quitline capacity to respond to the increased demand that the additional media would likely generate. Finally, we recommend additional NRT starter kits for eligible Quitline callers. To make further recommendations about how to deploy additional resources, we will need additional data on the effectiveness of the recently implemented Cessation Centers and ASP initiative.

## 5.2 Summary of Findings

We conclude this report with a summary of the key cross-cutting and goal-specific findings.

## 5.2.1 Cross-Cutting Findings

- From 2003 to 2004, the percentage of adults who smoke declined from 20.8 to 18.1 in New York, a relative decline of 13 percent and a reduction in the number of smokers by 300,000. This compares favorably to declines in the United States from 21.6 percent in 2003 to 20.8 percent in 2004, a 3 percent relative decline.
- From 2000 to 2004, the percentage of middle school students who smoke declined from 10.5 to 5.4 percent, and the percentage of high school students who smoke declined from 27.1 to 18.5 percent.
  - The decline in smoking among middle school students in New York was greater than declines in the United States as a whole from 2000 to 2004; declines among high school students were comparable to national declines.
- The use of tobacco products other than cigarettes declined among adults (from 9.1 percent in Q3 2003 to 5.4 percent in Q1 2005), middle school students (from 7.2 percent in 2000 to 5.6 percent in 2004), and high school students (from 17.9 percent in 2000 to 12.5 percent in 2004). The decline in other tobacco product use among high school students is driven primarily by declines in the use of cigars from 11.9 to 8.2 percent.
- Self-reported monthly cigarette consumption among smokers was stable from Q3 2003 to Q1 2005, at 23 packs per month.

- Tax-paid sales declined 47 percent in New York from 1999 to 2004. However, correcting for estimated purchases from tobacco retailers on American Indian reservations, the estimated decline was 31 percent.
  - These results suggest that cigarette sales in New York were 33 percent higher in 2004 when accounting for estimated sales from American Indian reservations. This translates to 79.5 packs per smoker per year or a "corrected" per capita consumption of 57.4 (instead of the tax-paid sales rate of 43.0).
- Estimates from the ATS suggest that as of Q1 2005, 57 percent of smokers report purchasing cigarettes from a low- or untaxed source at least once in the past 12 months, and 34 percent report purchasing from these locations "all the time" or "sometimes."
- Smokers who report purchasing cigarettes frequently from low- or untaxed sources pay \$1.59, or 31 percent, less per pack than those who do not.
- If tax avoidance were eliminated, the average reported price of cigarettes statewide would increase by 13 percent and lead to a 2 to 3 percent decrease in the prevalence of smoking and daily consumption of cigarettes.

# 5.2.2 Goal 1 Findings: Eliminate Exposure to Secondhand Smoke

# Exposure to SHS

- Overall exposure to SHS in rooms and cars has remained stable from Q3 2003 to Q1 2005.
  - However, the overall trend in exposure to SHS in homes masks a decline in exposure to SHS among nonsmokers and a curious increase in exposure among smokers, suggesting that smokers are congregating more to smoke.
  - We found that there was only a decline in exposure to SHS among nonsmokers who do not ban smoking in their homes (to levels comparable with nonsmokers who ban smoking in their homes).
  - In addition, while the trend in exposure to SHS in cars among nonsmokers remained stable, exposure among smokers increased.
- Exposure to SHS among youth declined from 2000 to 2004, with an apparent acceleration in the decline in exposure after 2002 when the CIAA was implemented.
  - There were parallel declines for youth living with and without smokers, although exposure to SHS remains considerably higher for youth living with a smoker.
  - Although adult smokers report being exposed to higher levels of SHS, this has not translated into higher exposure for youth living with adult smokers.
- Exposure to SHS in the workplace remains at 10 percent, the level reported in the 2004 IER.

# CIAA

- Findings from the complete Employee Health Study of hospitality workers confirm the results from the 2004 IER—that exposure to SHS declined precipitously after the CIAA.
  - Sensory symptoms that result from exposure to SHS also declined over time.

- The number of reported CIAA-related complaints increased steadily from Q3 2003 (implementation) to Q3 2004 and then declined for the next two quarters only to increase again in Q4 2004.
- The CIAA had no impact on sales in bars and full-service restaurants.
- Reports of observing smoking from restaurant patrons declined after Q3 2003 and have remained at low levels (4 to 6 percent) ever since.
- In contrast, reports of smoking in bars declined steadily from Q3 2003 to Q2 2004, after which they doubled from 13.4 percent in Q2 2004 to 27.7 percent in Q1 2005.
- From Q3 2003 to Q1 2005, support for the CIAA has increased overall and among smokers and nonsmokers, with the largest increase in support among smokers (who begin with lower baseline levels of support).

# Knowledge and Beliefs About SHS Risks

- Two of the four SHS-related beliefs about the health effects of SHS measured in the ATS increased from Q3 2003 to Q1 2005—the beliefs that SHS causes heart disease and lung cancer.
  - The increase in the belief that SHS causes heart disease was most pronounced for smokers, the most important target group.
  - Exposure to NYTCP media was associated with increased knowledge of SHS as a risk factor for heart disease and lung cancer among smokers.
  - These limited changes are consistent with the fact that the program and its partners were not able to run a significant amount of SHS-related media with themes consistent with these beliefs. In particular, no messages were targeted to the belief that SHS causes sudden infant death syndrome (SIDS), and only a few were targeted to the belief that SHS causes respiratory problems in children.
- Changes in knowledge would likely have been more systematic had the program and its funded partners been able to air media messages more consistently.
- One attitude that measures whether adults are bothered by SHS increased from Q3 2003 to Q2 2004 (after which more specific questions replaced this general question) among adults overall, smokers, and nonsmokers. This increase is likely because of changing norms as a result of the CIAA.
- Finally, the one SHS-related attitude measured in the YTS only changed among high school students; the percentage who thought SHS is harmful increased between 2000 and 2004. However, this attitude had a baseline value of about 90 percent for students overall, leaving little room for improvement.

# Voluntary Restrictions on Smoking in Homes and Cars

- Voluntary restrictions increased slightly in homes and cars from Q3 2003 to Q1 2005.
- These modest changes are consistent with programmatic efforts that are gradually focusing less on the CIAA and more on smoke-free homes and cars and effective implementation of smoke-free school policies.

# 5.2.3 Goal 2 Findings: Decrease the Social Acceptability of Tobacco

# Program Implementation

- NYTCP successfully launched a new and innovative intervention, the ASP initiative, in January 2005. This approach is well grounded in the scientific literature that shows how tobacco advertising and promotions influence smoking behavior, especially among youth.
- Sufficient time has not elapsed to fully evaluate this initiative, but early anecdotes point to the potential for these efforts to have an impact.
- The choice of countermarketing ads has improved significantly since the 2004 IER. This has had an impact on awareness of these ads among New Yorkers (see below).

# Tobacco Advertising and Sponsorships

- ATS data suggest modest declines in adults' awareness of tobacco advertising overall and in specific venues, such as sporting and cultural events.
- Youth's awareness of tobacco advertising in newspapers and magazines decreased from 2000 to 2004, although awareness of advertising on the Internet increased over the same time period.
- Based on in-store observations of advertising, point-of-purchase outdoor advertising is present in more than half of tobacco retailers and ubiquitous in retailers' interiors, with 94 percent having some interior advertising.
  - Retailers had an average of 16 tobacco ads on their store interiors.
- Data from the ATS and YTS shows similar results to the in-store observational data.
  - 82–83 percent of adults and 88 percent of middle and high school youth are aware of tobacco advertising in retail stores.
- Openness to tobacco marketing among high school students was constant from 2000 to 2004 but declined among middle school youth.

# Awareness of and Receptivity to Antitobacco Advertising

- Patterns in smokers' awareness of specific antitobacco message themes responded to the program's tobacco countermarketing efforts.
  - Awareness increased when effective ads were aired.
  - Awareness decreased when countermarketing efforts were off the air.
- Confirmed awareness of specific ads increased from 33 to 41 percent, an increase that corresponded with improved choices of ads.
  - Awareness reached 60 percent in the Buffalo area when the local Community Partnership aired "high impact" countermarketing messages to complement statewide efforts.

# Trends in Knowledge, Attitudes, and Beliefs

Trends in knowledge and perceptions of health risks were mixed from Q3 2003 to Q1 2005.

- Perceptions of the risks of smoking-related diseases remained stable among smokers. Awareness of NYTCP-sponsored antismoking ads was associated with greater recognition of the health risks of smoking.
- Nearly one third of smokers see little benefit in quitting if a smoker has smoked a pack a day for 20 years or more.
- However, an increasing percentage of smokers agree that the harmful effects of smoking have not been exaggerated.
- Smokers' misperceptions of the benefits of low-tar cigarettes and the addictiveness of nicotine patches decreased significantly over time but persist.
- Youth perceptions of the dangers of smoking increased modestly among high school students but remained relatively stable among middle school students.
- Attitudes and beliefs about smoking in the movies also present a mixed picture.
  - An increasing percentage of adults agree that movies rated G, PG, and PG-13 should not show actors smoking.
  - Adults increasingly recognize that smoking in the movies influences youth smoking.

# Coverage of Tobacco in the News

- Data from the ATS and the Tobacco News Tracking system suggest that the "slant" of tobacco-related news coverage has remained stable over time.
- The volume of news stories on tobacco dropped dramatically (to a third of the baseline level) after passing the 1-year anniversaries of the New York City and State clean indoor air laws.

# 5.2.4 Goal 3 Findings: Promote Cessation from Tobacco Use

# Health Care Provider Support for Cessation

- Our study of hospitals and data from the ATS describe the current level of support offered to smokers by health care providers, and both sources highlight significant opportunities for providers to support smokers in their attempts to quit smoking.
- Interviews with hospital administrators indicate that the current status regarding systems and practices to identify and treat patient tobacco use is mixed.
  - 40 percent of hospitals have written clinical guidelines or protocols for diagnosing and treating tobacco dependence.
  - 51 percent developed their own guidelines rather than using the Public Health Service Guideline for Treating Tobacco Use and Dependence.
  - 59 percent of hospitals report that they do not require providers to receive training about tobacco use assessment and treatment.
- The percentage of hospitals that require health care providers to adhere to the "5As" is generally quite low:
  - 87 percent ask new patients if they use tobacco,
  - 39 percent ask existing patients if they use tobacco,
  - 46 percent advise patients to quit,
  - 29 percent assess patients' willingness to quit,

- 13 percent assist patients willing to quit by offering counseling or NRT, and
- 24 percent arrange for follow-up contact for those willing to quit.
- Nearly all hospitals have a system in place to cue providers to assess patients' tobacco use, and 70 percent have systems to prompt the provision of advice. Only 20 percent have systems to track the patients' progress.
- Of smokers who visited a health care provider in the past 12 months, 87.0 percent were asked about tobacco use, 69.9 percent were advised to quit, and 38.0 percent were assisted with a quit attempt in 2004.

# Quitline

- Approximately two thirds of smokers had heard of the Quitline as of Q1 2005.
- The percentage of smokers who called the Quitline, according to the ATS, fluctuated from 2.5 to 10.1 percent.
- NYTCP-sponsored media messages are correlated with increased awareness of and calls to the Quitline. It is too early to assess the impact that the newly available NRT starter kits will have on cessation-related outcomes. However, the experience from New York City's NRT giveaway suggests that this new feature of the Quitline will increase the quit success rate among Quitline callers who use NRT.
- The Quitline offers counseling over the phone and, beginning in December 2004, callers can receive 2-week NRT.
- Health care providers can refer their patients to the Quitline using the Fax-to-Quit program, where the Quitline will call the patient to initiate cessation counseling. Referrals from the Fax-to-Quit program to the Quitline began in October 2004 and increased to 16 percent of all referrals by April 2005.

# Cessation Outcomes

- Intentions to quit in the next 30 days among current smokers increased from 20 to 31 percent from Q3 2004 to Q1 2005. Recall of NYTCP-sponsored media messages was associated with increased intentions to quit.
- The percentage of current and former smokers who made a quit attempt in the last 12 months and have remained quit for more than 6 months increased from 9 to 31 percent from Q3 2003 to Q3 2004—a sharp increase that corresponds to the downward trend in the prevalence of smoking. However, with the available data, we are not able to definitively attribute these positive trends to program efforts.
- Recall of NYTCP-sponsored cessation messages was associated with increased odds of having intentions to quit and trying to quit.
- Our findings also suggest that smokers' access to low- and untaxed cigarettes is correlated with a lower percentage of smokers making a quit attempt and with decreased intentions to quit.

# 5.2.5 Goal 4 Findings: Prevent Initiation of Youth and Young Adults

# Youth Smoking

- Declines in youth smoking were associated with tax increases that occurred in New York between 2000 and 2004.
- The county-level prevalence of cigarette excise tax evasion appears to be associated with higher rates of youth smoking.
  - The effects of tax increases on youth smoking appear to be weaker in areas of the state where the intensity of cigarette tax evasion is higher.
- We validated NYTCP's social norms approach to decreasing youth smoking by demonstrating that declines in adult smoking are followed by lower rates of youth smoking.

# Youth Access

- Compliance with youth access laws in New York has not significantly increased since the 2004 IER.
  - Vendor noncompliance rates have remained stable from 2000–2001 to 2003–2004.
- The percentage of youth smokers who purchase cigarettes loose is significantly higher among middle school students than among high school students.
  - The prevalence of purchasing cigarettes loose is significantly higher among all youth smokers in New York City than among youth smokers in the remainder of the state.

# 5.3 Summary of Recommendations

In summary, we recommend the following programmatic changes:

- Double funding for NYTCP to the CDC minimum recommended level.
- Increase investment in effective media to consistently reach a minimum of 60 percent awareness.
- Increase resources for the New York State Smokers' Quitline to
  - accommodate increases in demand from increased use of effective media, and
  - provide additional NRT starter kits.
- Increase funding for cessation to address key programmatic gaps.
- Place greater emphasis on effectively promoting smoke-free homes and cars in households with smokers.
  - Ensure that smoke-free home and car interventions are effective, based on available evidence.

# REFERENCES

- Albers, A.B., M. Siegel, D.M. Cheng, L. Biener, and N.A. Rigotti. 2004. "Relation Between Local Restaurant Smoking Regulations and Attitudes Towards the Prevalence and Social Acceptability of Smoking: a Study of Youths and Adults Who Eat Out Predominantly at Restaurants in Their Town." *Tobacco Control* 13(4):347-355.
- Alesci, N.L., J.L. Forster, and T. Blaine. 2003. "Smoking Visibility, Perceived Acceptability, and Frequency in Various Locations Among Youth and Adults." *Preventive Medicine* 36(3):272-281.
- Bauman, K.E., G.J. Botvin, E.M. Botvin, and E. Baker. 1992. "Normative Expectations and the Behavior of Significant Others—an Integration of Traditions in Research on Adolescents Cigarette-Smoking." *Psychological Reports* 71(2):568-570.
- Biener, L., and M. Siegel. 2000. "Tobacco Marketing and Adolescent Smoking: More Support for a Causal Inference." *American Journal of Public Health* 90(3):407-411.
- Biener, L., D. Cullen, Z.X. Di, and S.K. Hammond. 1997. "Household Smoking Restrictions and Adolescents' Exposure to Environmental Tobacco Smoke." *Preventive Medicine* May-Jun; 26(3):358-363.
- Centers for Disease Control and Prevention (CDC). 1999. "Best Practices for Comprehensive Tobacco Control Programs." Washington, DC: Centers for Disease Control and Prevention.
- Chaloupka, F., J.A. Tauras, and M. Grossman. 2000. "The Economics of Addiction." In *Tobacco Control in Developing Countries*, P. Jha and F. Chaloupka (eds.), pp. 107-129. Oxford: Oxford University Press.
- Chapman, S., and A. Dominello. 2001. "A Strategy for Increasing News Media Coverage of Tobacco and Health in Australia." *Health Promotion International* 16(2):137-143.
- Cummings, K.M., A. Hyland, M.A. Bansal, and G.A. Giovino. 2004. "What Do Marlboro Lights Smokers Know about Low-Tar Cigarettes?" *Nicotine Tob Res.* Suppl 3:S323-32.
- Dalton, M.A., J.D. Sargent, M.L. Beach, L. Titus-Ernstoff, J.J. Gibson, M.B. Ahrens, J.J. Tickle, and T.F. Heatherton. 2003. "Effect of Viewing Smoking in Movies on Adolescent Smoking Initiation: a Cohort Study." *Lancet* 362(9380):281-285.
- Durrant, R., M. Wakefield, K. McLeod, K. Clegg-Smith, and S. Chapman. 2003. "Tobacco in the News: An Analysis of Newspaper Coverage of Tobacco Issues in Australia, 2001." *Tobacco Control* 12 (Suppl II):ii75-ii81.
- Eisenberg, M.E., and J.L. Forster. 2003. "Adolescent Smoking Behavior—Measures of Social Norms." American Journal of Preventive Medicine 25(2):122-128.
- Eisner, M.D., A.K. Smith, and P.D. Blanc. 1998. "Bartenders' Respiratory Health after Establishment of Smoke-free Bars and Taverns." *Journal of the American Medical Association* 280: 1909-1914.

- Emery, S., M.M. White, and J.P. Pierce. 2001. "Does Cigarette Price Influence Adolescent Experimentation?" *Journal of Health Economics* 20:261-270.
- Evans, D., A. Ulasevich, F. Stillman, and V. Viswanath. 2003. "Tracking and Evaluation of Trends in Print Media." In F. Stillman and W. Trochim, eds., *Evaluation of Project* ASSIST: A Blueprint for State-Level Tobacco Control. National Cancer Institute Press: Bethesda, MD.
- Evans, W.N., M.C. Farrelly, and E. Montgomery. 1999. "Do Workplace Smoking Bans Reduce Smoking?" *American Economic Review* 89(4):728-747.
- Farkas, A.J., E.A. Gilpin, J.M. Distefan, and J.P. Pierce. 1999. "The Effects of Household and Workplace Smoking Restrictions on Quitting Behaviours." *Tobacco Control* 8(3):261-65.
- Farkas, A.J., E.A. Gilpin, M.M. White, and J.P. Pierce. 2000. "Association Between Household and Workplace Smoking Restrictions and Adolescent Smoking." *Journal of the American Medical Association* 284(6):717-722.
- Farrelly, M.C., C.G. Healton, K.C. Davis, P. Messeri, J.C. Hersey, and M.L. Haviland. 2002. "Getting to the Truth: Evaluating National Tobacco Countermarketing Campaigns." *American Journal of Public Health* 92(6):901-907.
- Farrelly, M.C., K.C. Davis, M.L. Haviland, P. Messeri, and C.G. Healton. 2005. "Evidence of a Dose-Response Relationship Between 'truth' Antismoking Ads and Youth Smoking." *American Journal of Public Health* 95(3):425-431.
- Farrelly, M.C., W.N. Evans, and A.E.S. Sfekas. 1999. "The Impact of Workplace Smoking Bans: Results From a National Survey." *Tobacco Control* 8(3):272-277.
- Federal Trade Commission (FTC). 2004. *Federal Trade Commission Cigarette Report for 2002*.
- Fishbein, M.G., and I. Azjen. 1975. *Belief, Attitude, Intention and Behavior: An Introduction to Theory and Research*. Reading, MA: Addison Wesley.
- Gilpin, E.A., M.M. White, A.J. Farkas, and J.P. Pierce. 1999. "Home Smoking Restrictions: Which Smokers Have Them and How They Are Associated with Smoking Behavior." *Nicotine and Tobacco Research* 1(2):153-162.
- Glantz, S.A. 2003. "Smoking in Movies: a Major Problem and a Real Solution." *Lancet* 362(9380):258-259.
- Henriksen, L., E.C. Feighery, Y. Wang, and S.P. Fortmann. 2004. "Association of Retail Tobacco Marketing With Adolescent Smoking." *American Journal of Public Health* 94(12):2081–2083.
- Hopkins, D.P., P.A. Briss, C.J. Ricard, C.G. Husten, V.G. Carande-Kulis, J.E. Fielding, M.O. Alao, J.W. McKenna, D.J. Sharp, J.R. Harris, T.A. Woollery, K.W. Harris, and the Task Force on Community Preventive Services. 2001. "Reviews of Evidence Regarding Interventions to Reduce Tobacco Use and Exposure to Environmental Tobacco Smoke." *Am J Prev Med* 20(2S):16-66.

- Hornik, R. 2002. *Public Health Communication: Evidence for Behavior Change*. Mahwah, NJ: Lawrence Erlbaum.
- Hughes, J.R., J.P. Keely, K.O. Fagerstrom, and P.W. Callas. 2005. "Intentions to Quit Smoking Change Over Short Periods of Time." *Addict Behav* 30(4):653-662.
- Hyland, A., J.R. Hughes, M. Farrelly, and K.M. Cummings. 2003. "Switching to Lower Tar Cigarettes Does Not Increase or Decrease the Likelihood of Future Quit Attempts or Cessation." *Nicotine Tob Res* 5(5):665-671.
- Hyland, A., D.T. Levy, J. Rezaishiraz, J.R. Hughes, J.E. Bauer, G.A. Giovino, and K.M. Cummings. 2005. "Reduction in Amount Smoked Predicts Future Cessation." *Psychol Addict Behav* 19(2):221-225.
- Kegler, M.C., and L.H. Malcoe. 2002. "Smoking Restrictions in the Home and Car Among Rural Native American and White Families with Young Children." *Preventive Medicine* 35(4): 334-342.
- Lefebvre, R.C. 1990. *Strategies to Maintain and Institutionalize Successful Programs: A Marketing Framework Health Promotion at the Community Level.* N. Bracht, ed., pp. 209-228. Newbury Park, CA: Sage Publications.
- Levy, D.T., K. Friend, and E. Polishchuk. 2001. "Effect of Clean Indoor Air Laws on Smokers: the Clean Air Module of the Simsmoke Computer Simulation Model." *Tobacco Control* 10(4):345-351.
- Magzamen, S. and S. Glantz. In press. "The New Battleground: California's Experience with Smokefree Bars." *American Journal of Public Health*.
- Magzamen, S., A. Charlesworth, and S. Glantz. 2001. "Print Media Coverage of California's Smokefree Bar Law." *Tobacco Control* 10:154-160.
- Miller, N., T.R. Frieden, S.Y. Liu, T.D. Matte, F. Mostashari, D.R. Deitcher, K.M. Cummings, C. Chang, U. Bauer, and M.T. Bassett. 2005. "Effectiveness of a Large-Scale Distribution Programme of Free Nicotine Patches: A Prospective Evaluation." *Lancet* 365: 1849-1854.
- Nonnemaker, J.M. 2002. "The Impact of State Excise Taxes, School Smoking Policies, State Tobacco Control Policies, and Peers on Adolescent Smoking." Unpublished Ph.D. manuscript. University of Minnesota.
- Norman, G.J., K.M. Ribisl, B. Howard-Pitney, K.A. Howard, and J.B. Unger. 2000. "The Relationship between Home Smoking Bans and Exposure to State Tobacco Control Efforts and Smoking Behaviors." *American Journal of Health Promotion*15(2):81-88.
- Orzechowski and Walker. 2004. *The Tax Burden on Tobacco*. Alexandria, VA: Orzechowski and Walker.
- Pierce, J.P., E.A. Gilpin, and A.J. Farkas. 1998. "Can Strategies Used by Statewide Tobacco Control Programs Help Smokers Make Progress in Quitting?" *Cancer Epidemiology, Biomarkers and Prevention* 7(6):459-464.

- Pizacani, B., M. Stark, C. Mosbaek, and J.E. Maher. 2002. EVAL-134. The Oregon Program: Use of an Integrated Evaluation Model on Media and the Quitline, School Programs, and Disparate Populations. Presented at the 2002 National Conference on Tobacco or Health. Everyone Counts: Achieving Parity through Tobacco Control. San Francisco, CA, November 19-21, 2002. <www.tobaccocontrolconference.org>.
- Rabius, V., A.L. McAlister, A. Geiger, P. Huang, and R. Todd. 2004. "Telephone Counseling Increases Cessation Rates Among Young Adult Smokers." *Health Psychology* 23(5): 539-541.
- Rohrbach, L.A., B. Howard-Pitney, J.B. Unger, C.W. Dent, K.A. Howard, T.B. Cruz, K.M. Ribisi, G.J. Norman, H. Fishbein, and C.A. Johnson. June 2002. "Independent Evaluation of the California Tobacco Control Program: Relationships Between Program Exposure and Outcomes, 1996–1998." *American Journal of Public Health* 92(6):975-983.
- Rosenberg, N.J., and M. Siegel. 2001. "Use of Corporate Sponsorship as a Tobacco Marketing Tool: a Review of Tobacco Industry Sponsorship in the USA, 1995-99." *Tobacco Control* 10(3):239-246.
- Rosenstock, I. 1974. "Historical Origins of the Health Belief Model." *Health Education Monographs* 2(4):328-332.
- Sargent, J.D., M.L. Beach, M.A. Dalton, L.A. Mott, J. Tickle, M.B. Ahrens, and T.F. Heatherton. 2001. "Effect of Seeing Tobacco Use in Films on Trying Smoking Among Adolescents: Cross Sectional Study." *British Medical Journal* 323(7326):1394-1397.
- Schooler, C., E. Feighery, and J.A. Flora. 1996. "Seventh Graders' Self-Reported Exposure to Cigarette Marketing and Its Relationship to Their Smoking Behavior." *American Journal of Public Health* 86(9):1216-1221.
- Sly, D.F., G.R. Heald, and S. Ray. 2001. "The Florida 'truth' Antitobacco Media Evaluation: Design, First Year Results, and Implications for Planning Future State Media Evaluations." *Tobacco Control* 10:9-15.
- Task Force on Community Preventive Services. Guide to Community Preventive Services. <a href="https://www.thecommunityguide.org">www.thecommunityguide.org</a>\tobacco>. Last updated July 2005.
- Tauras, J. 2004. "Public Policy and Smoking Cessation among Young Adults in the United States." *Health Policy* 68(3):321-332.
- Thomson, C.C., M. Siegel, J. Winickoff, L. Biener, and N.A. Rigotti. 2005. "Household Smoking Bans and Adolescents' Perceived Prevalence of Smoking and Social Acceptability of Smoking." *Preventive Medicine* 41(2):349-356.
- U.S. Department of Health and Human Services (DHHS). 2000. Reducing Tobacco Use: A Report of the Surgeon General. Washington, DC: U.S. Department of Health and Human Services.
- Wakefield, M.A., F.J. Chaloupka, N.J. Kaufman, C.T. Orleans, D.C. Barker, and E.E. Ruel. 2000. "Effect of Restrictions on Smoking at Home, at School, and in Public Places on Teenage Smoking: Cross Sectional Study." *British Medical Journal* 321(7257):333-337.

Zhu, S.H., C.M. Anderson, G.J. Tedeschi, B. Rosbrook, C.E. Johnson, M. Byrd, and E. Gutierrez-Terrell. 2002. "Evidence of Real-World Effectiveness of a Telephone Quitline for Smokers." *New England Journal of Medicine* 347(14):1087-1093.

# APPENDIX A: ANALYSES BY YEAR

Year	2003	2004
Estimate*	20.8%	18.1%
C.I.	[19.1-22.6]	[17.0-19.2]
Ν	3952	8236

#### AC. 4-2 Percentage of Adults Who Currently Smoke Every Day or Some Days by Year, ATS 2003-2004

#### AC. 4-3 Percentage of Middle School Students Who Currently Smoke by Year, YTS 2000-2004

Year	2000	2002	2004
Estimate*	10.5%	6.3%	5.4%
C.I.	[7.7-14.2]	[4.7-8.5]	[4.5-6.5]
N	4050	4312	3777

#### AC. 4-4 Percentage of High School Students Who Currently Smoke by Year, YTS 2000-2004

Year	2000	2002	2004
Estimate*	27.1%	20.4%	18.5%
C.I.	[22.6-32.2]	[18.0-23.2]	[15.9-21.5]
N	4516	3563	4103

#### AC. 4-5 Average number of Packs of Cigarettes Smoked Per Month By Adult Smokers by Year, ATS 2003-2004

Year	2003	2004
Estimate	22.1	22.8
C.I.	[20.5-23.6]	[21.5-24.1]
N	964	1776

#### AC. 4-6 Percentage of Adults Who Currently Use Any Tobacco Product Other than Cigarettes by Year, ATS 2003-2004

Year	2003	2004
Estimate*	9.1%	6.7%
C.I.	[7.7-10.6]	[5.9-7.6]
Ν	3939	8197

Year	2003	2004
Estimate*	6.6%	4.5%
C.I.	[5.4-7.9]	[3.9-5.2]
N	3951	8249

# AC. 4-7 Percentage of Adults Who Currently Smoke Cigars by Year, ATS 2003-2004

# AC. 4-8 Percentage of Middle and High School Students Who Have Used Tobacco Products Other Than Cigarettes in the Past 30 Days by Year, YTS 2000-2004

Year	2000	2002	2004
Middle School			
Estimate	7.2%	7.2%	5.6%
C.I.	[5.5-9.3]	[5.7-9.1]	[4.7-6.8]
N	4096	4192	3736
High School			
Estimate*	17.9%	14.6%	12.5%
C.I.	[14.3-22.1]	[12.1-17.4]	[10.8-14.5]
Ν	4589	3482	4126

# AC. 4-9 Percentage of Middle and High School Students Who Have Smoked Cigars in the Past 30 Days by Year, YTS 2000-2004

Year	2000	2002	2004
Middle School			
Estimate	4.5%	3.8%	3.5%
C.I.	[3.4-6.1]	[3.0-4.9]	[3.0-4.2]
N	4122	4305	3801
	_		
High School			
Estimate	11.9%	9.5%	8.2%
C.I.	[8.9-15.6]	[7.6-11.8]	[6.8-9.8]
N	4591	3528	4159

Year	2000	2002	2004
Middle School			
Estimate	1.9%	3.6%	2.5%
C.I.	[1.2-3.0]	[2.0-6.1]	[2.0-3.1]
Ν	4126	4290	3784
High School			
Estimate	4.5%	5.5%	4.0%
C.I.	[3.4-6.1]	[3.1-9.5]	[2.8-5.6]
N	4574	3526	4146

## AC. 4-10 Percentage of Middle and High School Students Who Have Used Smokeless Tobacco in the Past 30 Days by Year, YTS 2000-2004

AC. 4-14 Percentage of Smokers Who Purchased from
Any Low- or Untaxed Venue by Year, ATS 2003-2004

Year	2003	2004
Estimate*	63.3%	57.3%
C.I.	[58.8-67.7]	[53.5-61.0]
N	965	1369

## AC. 4-15a Percentage of Smokers Who Purchased At Least Once from an Indian Reservation in the Past 12 Months by Year, ATS 2003-2004

Year	2003	2004
Estimate	32.6%	31.9%
C.I.	[29.1-36.3]	[28.9-35.0]
N	960	1362

# AC. 4-15b Percentage of Smokers Who Purchased At Least Once from Out of State in the Past 12 Months by Year, ATS 2003-2004

Year	2003	2004
Estimate*	37.5%	31.4%
C.I.	[33.2-42.0]	[28.1-35.0]
N	961	1362

Year	2003	2004
Estimate	10.4%	9.1%
C.I.	[8.1-13.4]	[7.3-11.3]
N	964	1365

# AC. 4-15c Percentage of Smokers Who Purchased At Least Once from the Internet in the Past 12 Months by Year, ATS 2003-2004

#### AC. 4-15d Percentage of Smokers Who Purchased At Least Once from a Toll Free Number in the Past 12 Months by Year, ATS 2003-2004

Year	2003	2004
Estimate	6.2%	5.6%
C.I.	[4.4-8.6]	[4.3-7.4]
Ν	964	1361

#### AC. 4-15e Percentage of Smokers Who Purchased At Least Once Duty Free in the Past 12 Months by Year, ATS 2003-2004

Year	2003	2004
Estimate	14.7%	14.2%
C.I.	[11.7-18.2]	[11.9-16.8]
Ν	949	1353

# AC. 4-16 Percentage of Smokers Who Purchased "All the Time" or "Sometimes" from Any Low- or Untaxed Venue by Year, ATS 2003-2004

Year	2003	2004
Estimate	40.2%	37.2%
C.I.	[36.1-44.4]	[33.9-40.6]
N	965	1365

AC. 4-17a Percentage of Smokers Who Purchased "All the Time" or "Sometimes" from Indian Reservations in the Past 12 Months by Year, ATS 2003-2004

Year	2003	2004
Estimate	24.7%	24.5%
C.I.	[21.6-28.1]	[21.8-27.3]
N	957	1362

Year	2003	2004
Estimate	15.6%	12.5%
C.I.	[12.7-19.0]	[10.4-15.0]
N	960	1360

## AC. 4-17b Percentage of Smokers Who Purchased "All the Time" or "Sometimes" from Out of State in the Past 12 Months by Year, ATS 2003-2004

#### AC. 4-17c Percentage of Smokers Who Purchased "All the Time" or "Sometimes" from the Internet in the Past 12 Months by Year, ATS 2003-2004

Year	2003	2004
Estimate	6.5%	5.9%
C.I.	[4.7-8.9]	[4.5-7.7]
N	963	1364

AC. 4-17d Percentage of Smokers Who Purchased "All
the Time" or "Sometimes" from a Toll Free Number in
the Past 12 Months by Year, ATS 2003-2004

Year	2003	2004
Estimate	4.9%	3.7%
C.I.	[3.3-7.1]	[2.7-4.9]
N	964	1360

AC. 4-17e Percentage of Smokers Who Purchased "All
the Time" or "Sometimes" Duty Free in the Past 12
Months by Year, ATS 2003-2004

Year	2003	2004
Estimate	6.3%	6.2%
C.I.	[4.4-8.9]	[4.8-7.9]
N	949	1353

## AC. 4-28 Average Number of Hours in the Past 7 Days That Adults Spent in a Room Where Someone Was Smoking by Year, ATS 2003-2004

Year	2003	2004
Estimate	4.0	4.0
C.I.	[3.3-4.6]	[3.5-4.5]
N	3882	8054

Year	2003	2004
Estimate	1.0	1.0
C.I.	[0.6-1.3]	[0.8-1.2]
Ν	3927	8156

#### AC. 4-29 Average Number of Hours in the Past 7 Days That Adults Spent in a Vehicle Where Someone Was Smoking by Year, ATS 2003-2004

AC. 4-30 Average Number of Hours in the Past 7 Days
That Adult Nonsmokers Spent in a Room Where
Someone Was Smoking by Year, ATS 2003-2004

Year	2003	2004
Estimate*	2.0	1.0
C.I.	[1.5-2.6]	[0.8-1.1]
N	2946	6360

AC. 4-31 Average Number of Hours in the Past 7 Days
That Adult Smokers Spent in a Room Where Someone
Was Smoking by Year, ATS 2003-2004

Year	2003	2004
Estimate*	11.9	18.8
C.I.	[9.6-14.2]	[16.3-21.3]
Ν	932	1668

AC. 4-32 Average Number of Hours in the Past 7 Days That Adult Nonsmokers Spent in a Vehicle Where Someone Was Smoking by Year, ATS 2003-2004

Year	2003	2004
Estimate	0.5	0.3
C.I.	[0.1-0.9]	[0.2-0.4]
N	2956	6395

AC. 4-33 Average Number of Hours in the Past 7 Days That Adult Smokers Spent in a Vehicle Where Someone Was Smoking by Year, ATS 2003-2004

Year	2003	2004
Estimate*	2.8	4.5
C.I.	[1.8-3.9]	[3.5-5.6]
N	966	1733

Year	2000	2002	2004
Middle School			
Estimate*	2.4	2.2	1.8
C.I.	[2.2-2.7]	[1.7-2.7]	[1.6-2.0]
Ν	3936	3984	3748
High School			
Estimate*	3.1	2.7	2.3
C.I.	[2.8-3.4]	[2.5-2.9]	[2.1-2.6]
Ν	4543	3412	4166

# AC. 4-34 Number of Days in the Past Week Middle and High School Students Were in a Room with a Smoker by Year, YTS 2000-2004

#### AC. 4-35 Number of Days in the Past Week Middle and High School Students Were in a Car with a Smoker by Year, YTS 2000-2004

Year	2000	2002	2004
Middle School			
Estimate*	1.6	1.5	1.2
C.I.	[1.3-1.8]	[1.1-1.9]	[1.0-1.4]
Ν	3927	3971	3762
High School			
Estimate*	1.9	1.7	1.5
C.I.	[1.6-2.2]	[1.4-2.0]	[1.3-1.7]
Ν	4544	3412	4177

AC. 4-36a/37a Number of Days in the Past Week Middle School Students Who Live With a Smoker Were in a Room with a Smoker by Year, YTS 2000-2004

Year	2000	2002	2004
Middle School			
Estimate*	4.2	4.0	3.4
C.I.	[3.9-4.4]	[3.5-4.6]	[3.1-3.7]
Ν	1672	1464	1505
High School			
Estimate*	4.7	4.5	4.0
C.I.	[4.4-5.1]	[4.2-4.8]	[3.6-4.3]
N	1842	1257	1579

#### AC. 4-36b/37b Number of Days in the Past Week Middle School Students Who Do Not Live With a Smoker Were in a Room with a Smoker by Year, YTS 2000-2004

Year	2000	2002	2004
Middle School	2000	2002	2001
Estimate*	1.2	1.0	0.7
C.I.	[1.0-1.3]	[0.8-1.2]	[0.6-0.8]
N	2222	2445	2158
High School			
Estimate*	2.0	1.6	1.3
C.I.	[1.8-2.3]	[1.4-1.8]	[1.2-1.4]
N	2667	2102	2537

#### AC. 4-38a/39a Number of Days in the Past Week Middle School Students Who Live With a Smoker Were in a Car With a Smoker by Year, YTS 2000-2004

Year	2000	2002	2004
Middle School			
Estimate*	3.0	2.9	2.5
C.I.	[2.7-3.3]	[2.4-3.5]	[2.1-2.9]
Ν	1672	1461	1510
High School			
Estimate*	3.2	3.0	2.7
C.I.	[2.9-3.6]	[2.6-3.4]	[2.4-3]
Ν	1842	1256	1583

AC. 4-38b/39b Number of Days in the Past Week Middle School Students Who Do Not Live With a Smoker Were in a Car With a Smoker by Year, YTS 2000-2004

Year	2000	2002	2004
Middle School			
Estimate*	0.5	0.5	0.3
C.I.	[0.4-0.7]	[0.3-0.6]	[0.2-0.4]
Ν	2217	2442	2168
High School			
Estimate*	1.1	0.9	0.8
C.I.	[0.9-1.3]	[0.7-1.1]	[0.6-0.9]
N	2670	2108	2551

Year	2003	2004
Estimate	10.7%	10.0%
C.I.	[8.7-13.2]	[8.5-11.7]
N	1760	3616

# AC. 4-40 Percentage of Indoor Workers Who Reported Seeing Smoking in their Work Area in the Past Week by Year, ATS 2003-2004

AC. 4-41 Percentage of Indoor Workers with Smoke-
Free Workplaces by Year, ATS 2003-2004.

Year	2003	2004
Estimate	83.0%	81.2%
C.I.	[80.2-85.5]	[79.1-83.1]
N	1752	3604

#### AC. 4-45 Percentage of Restaurant Patrons Who Saw Smoking Indoors in the Past 30 Days by Year, ATS 2003-2004

Year	2003	2004
Estimate*	9.0%	4.4%
C.I.	[7.7-10.5]	[3.7-5.2]
N	3334	6445

### AC. 4-46 Percentage of Bar Patrons, Who Saw Smoking Indoors in the Past 30 Days by Year, ATS 2003-2004

Year	2003	2004
Estimate*	32.8%	19.3%
C.I.	[28.1-37.8]	[16.6-22.3]
N	748	1564

#### AC. 4-48 Percentage of Adults Who Favor the Clean Indoor Air Act by Year, ATS 2003-2004

Year	2003	2004
Estimate*	65.9%	72.2%
C.I.	[63.7-68.1]	[70.8-73.6]
N	3883	8107

Year	2003	2004
Estimate*	75.8%	80.6%
C.I.	[73.3-78.1]	[79.1-82.0]
N	2909	6308

#### AC. 4-49 Percentage of Adult Nonsmokers Who Favor the Clean Indoor Air Act by Year, ATS 2003-2004

# AC. 4-50 Percentage of Adult Smokers Who Favor the Clean Indoor Air Act by Year, ATS 2003-2004

Year	2003	2004
Estimate	28.2%	33.5%
C.I.	[24.2-32.6]	[30.3-36.9]
N	969	1768

#### AC. 4-55 Percentage of Adults Who Believe Secondhand Smoke Causes Heart Disease by Year, ATS 2003-2004

Year	2003	2004
Estimate*	67.6%	71.6%
C.I.	[65.3-69.7]	[70.2-73.0]
N	3943	8241

#### AC. 4-56 Percentage of Adult Smokers Who Believe Secondhand Smoke Causes Heart Disease by Year, ATS 2003-2004

Year	2003	2004
Estimate	52.5%	56.8%
C.I.	[48.0-57.0]	[53.4-60.0]
Ν	981	1809

AC. 4-57 Percentage of Adults Who Believe Secondhand Smoke Causes Lung Cancer by Year, ATS 2003-2004

Year	2003	2004
Estimate	81.3%	83.5%
C.I.	[79.4-83.0]	[82.3-84.6]
N	3947	8247

Year	2003	2004
Estimate	64.6%	65.5%
C.I.	[60.3-68.8]	[62.3-68.6]
Ν	983	1808

#### AC. 4-58 Percentage of Adult Smokers Who Believe Secondhand Smoke Causes Lung Cancer by Year, ATS 2003-2004

#### AC. 4-58a Percentage of Adults Who Believe Secondhand Smoke Causes Colon Cancer, by Year, ATS 2003-2004

Year	2003	2004
Estimate	30.8%	33.0%
C.I.	[28.6-33.1]	[31.4-34.5]
N	3933	8221

#### AC. 4-58b Percentage of Adult Smokers Who Believe Secondhand Smoke Causes Colon Cancer by Year, ATS 2003-2004

Y	'ear	2003	2004
Est	imate	24.4%	25.5%
(	C.I.	[20.5-28.7]	[22.6-28.7]
	Ν	983	1808

# AC. 4-58c Percentage of Adults Who Believe Secondhand Smoke Causes Respiratory Problems in Children by Year, ATS 2003-2004

Year	2003	2004
Estimate	91.6%	92.2%
C.I.	[90.2-92.8]	[91.4-93.0]
N	3949	8253

AC. 4-58d Percentage of Adult Smokers Who Believe Secondhand Smoke Causes Respiratory Problems in Children by Year, ATS 2003-2004

Year	2003	2004
Estimate	83.1%	84.7%
C.I.	[79.5-86.1]	[82.3-86.8]
N	983	1807

AC. 4-58e Percentage of Adults Who Believe
Secondhand Smoke Causes SIDS by Year, ATS 2003-
2004

Year	2003	2004
Estimate	36.6%	39.5%
C.I.	[34.3-39.0]	[37.9-41.1]
Ν	3923	8207

#### AC. 4-58f Percentage of Adult Smokers Who Believe Secondhand Smoke Causes SIDS by Year, ATS 2003-2004

Year	2003	2004
Estimate	28.5%	32.3%
C.I.	[24.5-32.9]	[29.1-35.6]
Ν	977	1799

# AC. 4-59 Percentage of Adults Who Are Bothered by Secondhand Smoke by Year, ATS 2003-2004

Year	2003	2004
Estimate*	69.0%	75.0%
C.I.	[66.8-71.2]	[73.2-76.8]
N	3945	4172

#### AC. 4-60 Percentage of Adult Nonsmokers Who Are Bothered by Secondhand Smoke by Year, ATS 2003-2004

Year	2003	2004
Estimate*	78.5%	83.9%
C.I.	[76.1-80.8]	[82.0-85.6]
N	2957	3167

#### AC. 4-61 Percentage of Adult Smokers Who Are Bothered by Secondhand Smoke by Year, ATS 2003-2004

Year	2003	2004
Estimate	32.6%	37.8%
C.I.	[28.5-36.9]	[33.5-42.4]
N	983	994

Year	2000	2002	2004
Middle School			
Estimate*	90.2%	87.1%	92.1%
C.I.	[87.8-92.1]	[83.0-90.2]	[90.5-93.5]
N	3954	4191	3742
High School			
Estimate	90.5%	90.9%	93.1%
C.I.	[88.3-92.2]	[87.7-93.4]	[91.4-94.5]
N	4554	3505	4171

#### AC. 4-62 Percentage of Middle and High School Students Who Think Secondhand Smoke is Harmful by Year, YTS 2000-2004

# AC. 4-63 Percentage of Adults in Smoke-free Homes, by Year, ATS 2003-2004

Year	2003	2004
Estimate*	68.3%	71.0%
C.I.	[66.1-70.4]	[69.5-72.4]
N	3944	8246

# AC. 4-64 Percentage of Adult Nonsmokers in Smokefree Homes by Year, ATS 2003-2004

Year	2003	2004
Estimate	78.4%	80.4%
C.I.	[76.1-80.5]	[78.9-81.8]
N	2955	6403

#### AC. 4-65 Percentage of Adult Smokers in Smoke-free Homes by Year, ATS 2003-2004

Year	2003	2004
Estimate	29.3%	28.0%
C.I.	[25.3-33.6]	[25.2-31.0]
N	984	1812

#### AC. 4-66 Percentage of Adults in Smoke-free Cars by Year, ATS 2003-2004

Year	2003	2004
Estimate*	73.1%	77.7%
C.I.	[71.0-75.1]	[76.3-79.0]
N	3575	7212

Year	2003	2004
Estimate*	84.3%	87.8%
C.I.	[82.2-86.3]	[86.5-89.0]
N	2707	5646

#### AC. 4-67 Percentage of Adult Nonsmokers in Smokefree Cars by Year, ATS 2003-2004

# AC. 4-68 Percentage of Adult Smokers in Smoke-free Cars by Year, ATS 2003-2004

Year	2003	2004
Estimate	27.3%	28.6%
C.I.	[23.1-32.0]	[25.4-32.0]
Ν	863	1539

# AC. 4-70 Percentage of Adults Who Believe Tobacco-Related News Stories are Negatively Slanted in the Media by Year, ATS 2003-2004

Year	2003	2004
Estimate	46.5%	45.3%
C.I.	[44.1-48.9]	[43.7-46.9]
N	3872	8023

#### AC. 4-74 Percentage of Adults Who Noticed Tobacco Advertising at Sporting Events by Year, ATS 2003-2004

Year	2003	2004
Estimate	17.3%	15.2%
C.I.	[15.4-19.3]	[14.0-16.4]
Ν	3915	8111

AC. 4-75 Percentage of Adults Who Noticed Tobacco Advertising at Cultural Events by Year, ATS 2003-2004

Year	2003	2004
Estimate	9.8%	9.1%
C.I.	[8.3-11.5]	[8.1-10.1]
Ν	3917	8104

AC. 4-79 Percentage of Middle and High School		
Students Who Saw Tobacco Advertising in Grocery		
Stores or Gas Stations by Year, YTS 2000-2004		

	1		
Year	2000	2002	2004
Middle School			
Estimate*	92.4%	92.1%	86.8%
C.I.	[90.4-94.0]	[89.1-94.4]	[84.0-89.2]
N	3966	4045	3567
High School			
Estimate*	92.2%	94.4%	89.8%
C.I.	[89.3-94.4]	[92.2-95.9]	[87.7-91.5]
N	4565	3456	4108

#### AC. 4-80 Average Index of Awareness of Tobacco Advertising or Promotions Among Adults by Year, ATS 2003-2004

Year	2003	2004
Estimate	1.1	1.0
C.I.	[1.0-1.2]	[1.0-1.1]
N	3957	8268

# AC. 4-80a Percentage of Adults Who Noticed Tobacco Advertising or Promotions At Least Once a Day on Posters or Billboards by Year, ATS 2003-2004

Year	2003	2004
Estimate	17.5%	17.2%
C.I.	[15.8-19.5]	[16.0-18.5]
N	3898	8057

AC. 4-80b Percentage of Adults Who Noticed Tobacco Advertising Or Promotions At Least Once A Day In Newspapers Or Magazines by Year, ATS 2003-2004

Year	2003	2004
Estimate	26.3%	27.1%
C.I.	[24.2-28.5]	[25.6-28.6]
N	3889	8037

# AC. 4-80c Percentage of Adults Who Noticed Tobacco Advertising Or Promotions At Least Once A Day In Shop Windows Or Inside Shops Where Tobacco Is Sold by Year, ATS 2003-2004

Year	2003	2004
Estimate	3.3%	3.4%
C.I.	[2.5-4.5]	[2.8-4.0]
N	3902	8049

# AC. 4-80d Percentage of Adults Who Noticed Tobacco Advertising Or Promotions At Least Once A Day On Leaflets by Year, ATS 2003-2004

Year	2003	2004
Estimate	3.3%	3.4%
C.I.	[2.5-4.5]	[2.8-4.0]
N	3902	8049

# AC. 4-80e Percentage of Adults Who Noticed Tobacco Advertising Or Promotions At Least Once A Day Over The Internet by Year, ATS 2003-2004

Year	2003	2004
Estimate	2.6%	2.6%
C.I.	[2.0-3.5]	[2.1-3.1]
Ν	3929	8157

#### AC. 4-81 Percentage of Middle and High School Students Who Would Wear Tobacco Branded Attire by Year, YTS 2000-2004

Year	2000	2002	2004
Middle School			
Estimate	22.1%	19.7%	20.5%
C.I.	[18.6-26.1]	[15.6-24.7]	[18.6-22.6]
Ν	3936	3976	3653
High School			
Estimate*	33.7%	28.2%	28.1%
C.I.	[30.6-36.9]	[24.7-31.8]	[25.7-30.6]
N	4552	3420	4148

Year	2000	2002	2004
Middle School			
Estimate*	56.8%	68.7%	65.8%
C.I.	[53.1-60.5]	[65.5-71.8]	[62.1-69.4]
Ν	4026	4059	3605
High School			
Estimate*	57.5%	71.8%	72.1%
C.I.	[54.2-60.7]	[69.0-74.5]	[69.2-74.8]
Ν	4576	3458	4127

#### AC 4-82 Percentage of Middle and High School Students Who Have Seen Tobacco Advertising on the Internet by Year, YTS 2000-2004

#### AC. 4-83 Percentage of Middle and High School Students Who Have Seen Tobacco Advertising in Newspapers or Magazines by Year, YTS 2000-2004

Year	2000	2002	2004
Middle School			
Estimate*	77.6%	77.2%	61.9%
C.I.	[75.0-80.0]	[74.9-79.4]	[58.5-65.2]
N	3984	4051	3514
High School			
Estimate*	84.7%	84.8%	76.4%
C.I.	[82.4-86.8]	[82.3-87.0]	[74.3-78.5]
N	4565	3456	4114

# AC. 4-84 Percentage of Adults Who Have Seen Antismoking Advertising on Television by Year, ATS 2003-2004

Year	2003	2004
Estimate*	74.4%	70.9%
C.I.	[72.2-76.4]	[69.4-72.4]
N	3729	7507

AC. 4-85 Percentage of Adults Who Have Seen Advertising About Family Members Losing a Loved One Due to Smoking-Related Illnesses by Year, ATS 2003-2004

Year	2003	2004
Estimate	45.8%	47.6%
C.I.	[43.4-48.2]	[46.0-49.2]
N	3918	8150

#### AC. 4-86 Percentage of Adult Smokers Who Have Seen Advertising About Family Members Losing a Loved One Due to Smoking-Related Illnesses by Year, ATS 2003-2004

Year	2003	2004
Estimate	45.5%	49.4%
C.I.	[41.1-50.1]	[46.1-52.8]
N	975	1786

#### AC. 4-87 Percentage of Adult Smokers Who Have Noticed Advertising About the Dangers of Children Being Exposed to Cigarette Smoke by Year, ATS 2003-2004

Year	2003	2004
Estimate	64.1%	67.5%
C.I.	[59.5-68.4]	[64.3-70.5]
N	973	1798

# AC. 4-88 Percentage of Adult Smokers Who Have Noticed Advertisements About Calling a Quitline by Year, ATS 2003-2004

Year	2003	2004
Estimate	55.4%	56.3%
C.I.	[50.8-59.9]	[53.0-59.6]
Ν	970	1797

AC. 4-90 Percentage of Adults Who Reported Confirmed Awareness of and Reaction to NYTCP Media Campaign Advertisements (Statewide and Local) by Year, ATS 2003-2004

Year	2003	2004
Estimate*	5.9%	14.0%
C.I.	[5.0-6.9]	[13.0-15.2]
N	3957	8267

AC. 4-96 Percentage of Adult Smokers Who Believed Smokers Have a Higher Risk of Heart Attack by Year, ATS 2003-2004

Year	2003	2004
Estimate	58.9%	62.2%
C.I.	[54.3-63.3]	[57.6-66.5]
N	951	961

Year	2003	2004
Estimate	74.3%	76.8%
C.I.	[70.2-78.1]	[73.0-80.3]
N	963	973

## AC. 4-97 Percentage of Adult Smokers Who Believed Smokers Have a Higher Risk of Lung Cancer by Year, ATS 2003-2004

AC. 4-98 Percentage of Adult Smokers Who Believed Smokers Have a Higher Risk of Cancers Other Than Lung Cancer by Year, ATS 2003-2004

Year	2003	2004
Estimate	46.9%	52.4%
C.I.	[42.4-51.5]	[47.8-57.0]
N	944	950

AC. 4-99 Percentage of Adult Smokers Who Think There
Is Little Health Benefit To Quitting If a Person Has
Smoked a Pack of Cigarettes a Day for More Than 20
Years by Year, ATS 2003-2004

Year	2003	2004
Estimate	32.1%	32.8%
C.I.	[27.8-36.8]	[28.6-37.4]
Ν	960	963

AC. 4-100 Percentage of Adult Smokers Who Do Not Think That High-Tar Cigarettes Are At Least Twice As Likely To Cause Illness As Low-Tar Cigarettes by Year, ATS 2003-2004

Year	2003	2004
Estimate	38.9%	44.1%
C.I.	[34.4-43.6]	[39.4-48.9]
Ν	849	864

AC. 4-101 Percentage of Adult Smokers Who Believe Nicotine Patches Are Not as Addictive as Cigarettes by Year, ATS 2003-2004

Year	2003	2004
Estimate	64.7%	63.1%
C.I.	[59.3-69.7]	[59.1-67.0]
N	683	1250

## AC. 4-104 Percentage of Adults Who Agree That Movies Rated G, PG, and PG-13 Should Not Show Actors Smoking by Year, ATS 2003-2004

Year	2003	2004
Estimate	68.3%	69.6%
C.I.	[65.2-71.3]	[68.1-71.1]
Ν	1987	7861

AC. 4-105 Percentage of Adults Who Disagree With The Statement "Smoking In The Movies Does Not Encourage Smoking Among Teens" by Year, ATS 2003-2004

Year	2003	2004
Estimate*	72.2%	68.0%
C.I.	[69.1-75.2]	[66.4-69.5]
N	1974	7834

# AC. 4-106 Percentage of Middle and High School Students Who Think Smoking Makes People Look Cool by Year, YTS 2002-2004

Year	2002	2004
Middle School		
Estimate*	15.5%	11.2%
C.I.	[12.9-18.5]	[10.0-12.4]
Ν	4199	3620
High School		
Estimate*	14.8%	10.9%
C.I.	[12.5-17.3]	[9.1-13.1]
Ν	3501	4141

# AC. 4-107 Percentage of Middle and High School Students Who Think it is Safe to Smoke for Just a Year or Two by Year, YTS 2002-2004

Year	2002	2004
Middle School		
Estimate	10.1%	9.6%
C.I.	[8.7-11.8]	[8.5-10.9]
N	4206	3665
High School		
Estimate*	13.3%	10.4%
C.I.	[11.8-14.9]	[8.8-12.3]
N	3504	4138

Year	2003	2004
Estimate	61.6%	63.7%
C.I.	[57.0-65.9]	[60.3-66.9]
Ν	985	1812

#### AC. 4-112 Percentage of Adult Smokers Who Visited a Doctor, Nurse, or Other Health Professional in the Past 12 Months by Year, ATS 2003-2004

AC. 4-113 Percentage of Adult Smokers Who Were Asked If They Smoked When They Visited a Health Care Provider in the Past 12 Months by Year, ATS 2003-2004

Year	2003	2004
Estimate*	91.9%	87.0%
C.I.	[88.2-94.6]	[83.6-89.8]
N	644	1216

AC. 4-114 Percentage of Adult Smokers Who Were Advised to Quit Smoking When They Visited a Health Care Provider in the Past 12 Months by Year, ATS 2003-2004

Year	2003	2004
Estimate	74.7%	69.9%
C.I.	[69.3-79.5]	[65.8-73.8]
Ν	645	1219

AC. 4-115 Percentage of Adult Smokers Who Report that their Health Care Provider Assisted Them with Smoking Cessation When They Visited a Health Care Provider in the Past 12 Months by Year, ATS 2003-2004

Year	2003	2004
Estimate	37.4%	38.0%
C.I.	[32.3-42.9]	[34.2-41.9]
N	642	1213

Year	2003	2004
Estimate	54.7%	57.0%
C.I.	[50.2-59.2]	[53.7-60.3]
N	978	1803

### AC. 4-116 Percentage of Adult Smokers Who Have Heard of the New York State Smokers' Quitline by Year, ATS 2003-2004

#### AC. 4-117 Percentage of Adult Smokers Who Have Called the New York State Smokers'Quitline by Year, ATS 2003-2004

Year	2003	2004
Estimate	6.4%	6.7%
C.I.	[3.7-10.8]	[4.8-9.2]
N	534	1031

#### AC. 4-120 Percentage of Adult Former Smokers or Current Smokers with A Quit Attempt in the Past 12 Months Who Have Used a Nicotine Patch or Nicotine Gum by Year, ATS 2003-2004

Year	2003	2004
Estimate	27.0%	22.6%
C.I.	[21.8-32.9]	[19.3-26.4]
N	545	1047

#### AC. 4-121 Percentage of Adult Smokers Who Were Planning to Stop Smoking in the Next 30 Days by Year, ATS 2003-2004

Year	2003	2004
Estimate	26.0%	24.3%
C.I.	[22.0-30.4]	[21.2-27.7]
N	901	1517

#### AC. 4-122 Percentage of Smokers Who Made a Quit Attempt in the Past 12 Months by Year, ATS 2003-2004

Year	2003	2004
Estimate	46.3%	46.3%
C.I.	[41.9-50.9]	[43.0-49.6]
Ν	982	1810

#### AC. 4-123 Percentage of Smokers Who Made a Successful Quit Attempt in the Past 12 Months (Remained Quit for More Than 6 Months) by Year, ATS 2003-2004

Year	2003	2004
Estimate*	12.0%	22.6%
C.I.	[8.1-17.3]	[19.1-26.6]
N	584	1288

AC. 4-129 Percentage of Middle and High School Students Who Have Been Asked for Proof of Age When Purchasing Cigarettes by Year, YTS 2000-2004

Year	2000	2002	2004
Middle School			
Estimate	35.0%	22.3%	30.4%
C.I.	[24.5-47.1]	[10.0-42.6]	[25.0-36.4]
N	211	213	182
High School			
Estimate	49.4%	54.7%	53.5%
C.I.	[43.9-54.9]	[46.4-62.8]	[47.7-59.3]
N	913	527	549

#### AC. 4-130 Percentage of Middle and High School Students Who Have Been Refused Sale of Cigarettes Because of Age by Year, YTS 2000-2004

Year	2000	2002	2004
Middle School			
Estimate	37.2%	30.2%	39.8%
C.I.	[27.8-47.6]	[23.8-37.4]	[34.6-45.3]
N	251	251	195
High School			
Estimate	31.8%	33.1%	35.9%
C.I.	[25.7-38.5]	[24.9-42.5]	[29.6-42.7]
N	919	536	523

# APPENDIX B: ANALYSES BY DEMOGRAPHIC CHARACTERISTICS

Category	Estimate	C.I.	Ν
Age*			
18-24	29.7%	[25.2-34.7]	563
25-34	20.5%	[17.8-23.5]	1249
35-44	20.6%	[18.1-23.3]	1609
45-54	18.4%	[16.0-21.1]	1635
55-64	14.5%	[12.2-17.1]	1356
65 + years	7.0%	[5.7-8.6]	1646
Race			
White (non-Hispanic)	18.3%	[17.1-19.6]	6144
Black (non-Hispanic)	19.3%	[16.1-23.0]	806
Hispanic	17.8%	[14.5-21.7]	760
Other	14.0%	[10.7-18.2]	526
Gender*			
Male	20.0%	[18.2-21.9]	3197
Female	16.3%	[15.0-17.7]	5036
Education*			
Less Than High School	28.3%	[23.6-33.5]	654
High School	24.7%	[22.2-27.2]	2212
Some College	19.6%	[17.5-22.0]	1985
College Degree or More	10.1%	[8.9-11.5]	3349
Region*			
Western	22.1%	[19.5-24.8]	1701
Central	23.9%	[20.5-27.8]	952
Capital	23.6%	[20.1-27.5]	957
Metro	15.8%	[14.4-17.2]	4626
Insurance*			
Public	18.6%	[16.4-21.1]	1962
Private	15.0%	[13.8-16.3]	5096
None	28.2%	[24.5-32.2]	978

# DT. 4-2 Percentage of Adults Who Currently Smoke Every Day or Some Days by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	Ν
Gender			
Female	5.8%	[4.4-7.5]	1936
Male	5.1%	[4.0-6.4]	1818
Race*			
White	5.5%	[4.4-6.9]	1471
Black	3.3%	[1.8-6.2]	786
Hispanic	7.6%	[5.8-9.8]	939
Other	5.2%	[3.3-8.0]	400
Grade*			
6th	3.5%	[2.3-5.4]	981
7th	6.0%	[4.1-8.8]	1471
8th	6.7%	[5.8-7.7]	1325
Region			
Rest of State	6.0%	[4.9-7.3]	1978
New York City	4.4%	[3.5-5.7]	1799

#### DT. 4-3 Percentage of Middle School Students Who Currently Smoke by Demographic Characteristics, YTS 2004

#### DT. 4-4 Percentage of High School Students Who Currently Smoke by Demographic Characteristics, YTS 2004

Category	Estimate	C.I.	Ν
Gender			
Female	17.5%	[14.1-21.4]	2204
Male	19.9%	[17.3-22.6]	1863
Race*			
White	23.2%	[20.0-26.6]	1926
Black	6.5%	[3.5-11.8]	674
Hispanic	14.3%	[11.9-17.1]	831
Other	15.7%	[12.5-19.6]	546
Grade*			
9th	12.5%	[9.9-15.6]	1250
10th	16.7%	[13.2-20.9]	1054
11th	21.5%	[16.8-27.1]	888
12th	26.8%	[21.4-33.1]	911
Region*			
Rest of State	22.2%	[19.6-25.0]	2443
New York City	11.4%	[7.7-16.6]	1660

Category	Estimate	C.I.	N
Age*			
18-24	18.3	[14.9-21.7]	215
25-34	18.6	[16.3-20.8]	336
35-44	24.9	[22.5-27.3]	413
45-54	26.8	[23.6-30.0]	398
55-64	24.6	[21.5-27.8]	244
65 + years	29.3	[23.8-34.8]	153
Race*			
White (non-Hispanic)	26.1	[24.5-27.7]	1320
Black (non-Hispanic)	17.1	[13.8-20.4]	184
Hispanic	15.2	[12.2-18.2]	164
Other	21.1	[16.3-25.9]	108
Gender			
Male	24.0	[22.1-25.9]	777
Female	21.5	[19.9-23.2]	998
Education*			
Less Than High School	21.9	[18.3-25.6]	210
High School	25.4	[23.2-27.5]	633
Some College	22.8	[20.8-24.7]	509
College Degree or More	19.4	[16.2-22.6]	421
Region*			
Western	25.2	[23.2-27.2]	411
Central	27.6	[24.7-30.4]	246
Capital	25.7	[22.5-28.9]	237
Metro	20.7	[18.8-22.6]	882
Insurance			
Public	23.0	[20.2-25.7]	410
Private	23.3	[21.4-25.2]	981
None	22.6	[20.1-25.1]	346

# DT. 4-5 Average Number of Packs of Cigarettes Smoked Per Month by Adult Smokers by Demographic Characteristics, ATS 2004.

Category	Estimate	C.I.	Ν
Age*			
18-24	12.7%	[9.7-16.5]	559
25-34	8.2%	[6.3-10.6]	1241
35-44	7.7%	[6.0-9.9]	1600
45-54	5.6%	[4.0-7.7]	1628
55-64	4.4%	[3.1-6.1]	1354
65 + years	2.8%	[1.8-4.4]	1635
Deer			
Race	( 00(		(101
White (non-Hispanic)	6.8%	[5.9-7.7]	6121
Black (non-Hispanic)	6.2%	[4.1-9.3]	806
Hispanic	7.0%	[4.7-10.2]	750
Other	6.9%	[4.5-10.3]	520
Gender*			
Male	11.5%	[10.1-13.1]	3178
Female	2.4%	[1.8-3.3]	5016
Education			
Less Than High School	5.2%	[3.6-7.5]	651
High School	7.2%	[5.6-9.1]	2192
Some College	8.2%	[6.5-10.3]	1977
College Degree or More	5.9%	[4.8-7.1]	3339
Degian			
Region	7.00/		1(00
Western	7.3%	[5.6-9.3]	1693
Central	8.1%	[5.9-11.0]	950
Capital	7.9%	[5.8-10.8]	949
Metro	6.3%	[5.3-7.4]	4605
Insurance*			
Public	3.8%	[2.9-5.0]	1949
Private	7.0%	[6.0-8.2]	5071
None	9.6%	[7.3-12.4]	977

### DT. 4-6 Percentage of Adults Who Currently Use Any Tobacco Product Other than Cigarettes by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	Ν
Age*			
18-24	8.2%	[5.8-11.5]	562
25-34	4.8%	[3.4-6.6]	1251
35-44	5.4%	[4.1-7.2]	1611
45-54	4.6%	[3.2-6.7]	1633
55-64	3.5%	[2.4-5.1]	1360
65 + years	1.3%	[0.8-2.0]	1651
Race			
White (non-Hispanic)	4.8%	[4.1-5.6]	6154
Black (non-Hispanic)	3.1%	[1.8-5.2]	812
Hispanic	5.5%	[3.5-8.5]	757
Other	2.5%	[1.4-4.5]	526
Gender*			
Male	0.10/	[6 0 0 5]	2202
	8.1% 1.3%	[6.9-9.5]	3202 5044
Female	1.3%	[0.9-1.8]	5044
Education*			
Less Than High School	3.5%	[2.2-5.3]	656
High School	3.9%	[2.9-5.2]	2213
Some College	6.2%	[4.7-8.2]	1985
College Degree or More	4.2%	[3.3-5.2]	3357
Desien			
Region	F 00/	[2 ( 7 0]	1700
Western	5.0%	[3.6-7.0]	1703
Central	4.7% 5.7%	[3.2-6.8]	952
Capital		[3.9-8.4]	958
Metro	4.2%	[3.5-5.1]	4636
Insurance*			
Public	2.8%	[2.0-3.9]	1965
Private	4.7%	[3.9-5.7]	5100
None	5.8%	[4.2-8.0]	982

# DT. 4-7 Percentage of Adults Who Currently Smoke Cigars by Demographic Characteristics, ATS 2004

#### DT. 4-8 Percentage of Middle and High School Students Who Have Used Tobacco Products Other Than Cigarettes in the Past 30 Days by Demographic Characteristics, YTS 2004

Category	Estimate	C.I.	N
Middle School			
Gender*			
Female	3.5%	[2.7-4.5]	1922
Male	7.8%	[5.8-10.4]	1793
Race*			
White	4.4%	[3.2-6.0]	1480
Black	5.9%	[3.8-9.1]	755
Hispanic	8.4%	[7.0-10.1]	935
Other	6.7%	[3.2-13.4]	393
Grade			
6th	4.5%	[3.1-6.6]	947
7th	6.8%	[4.7-9.7]	1451
8th	5.5%	[4.1-7.5]	1338
Region*			
Rest of State	4.8%	[3.6-6.4]	1982
New York City	7.2%	[5.7-9.1]	1754
High School			
Gender*			
Female	6.9%	[5.5-8.6]	2233
Male	19.9%	[17.2-22.9]	1859
Race*			
White	14.8%	[13.1-16.8]	1961
Black	4.5%	[2.2-9.0]	659
Hispanic	10.8%	[8.2-14.2]	828
Other	9.6%	[7.2-12.7]	551
Grade*			
9th	9.6%	[7.3-12.4]	1266
10th	12.5%	[9.1-16.9]	1069
11th	12.7%	[9.9-16.2]	894
12th	17.0%	[12.6-22.5]	897
Region*			
Rest of State	14.6%	[12.8-16.6]	2485
New York City	8.4%	[6.3-11.1]	1641

Category	Estimate	C.I.	Ν
Middle School	Lotinato	0	
Gender*			
Female	2.3%	[1.8-3.1]	1941
Male	4.8%	[3.5-6.5]	1839
Race*			
White	2.4%	[1.9-3.1]	1491
Black	3.7%	[1.9-6.8]	773
Hispanic	5.5%	[4.0-7.6]	955
Other	5.0%	[2.8-9.0]	401
Grade			
6th	2.9%	[1.9-4.4]	965
7th	4.0%	[2.8-5.6]	1477
8th	3.7%	[2.8-4.7]	1359
Region*			
Rest of State	3.0%	[2.3-3.8]	1998
New York City	4.5%	[3.7-5.5]	1803
High School			
Gender*			
Female	4.1%	[3.0-5.5]	2247
Male	13.4%	[11.3-15.8]	1877
Race*			
White	10.1%	[8.9-11.6]	1966
Black	2.6%	[1.0-6.7]	670
Hispanic	6.6%	[4.7-9.1]	840
Other	6.0%	[3.6-9.8]	555
Grade*	<b>E F O</b> (		1000
9th	5.5%	[4.0-7.6]	1280
10th	7.6%	[6.0-9.6]	1076
11th	8.4%	[6.1-11.4]	894
12th	12.8%	[9.5-17.0]	909
Region*			
Rest of State	10.0%	[8.7-11.4]	2478
New York City	4.6%	[2.8-7.6]	1681
NEW TOLK CILY	4.070	[2.0-7.0]	1001

# DT. 4-9 Percentage of Middle and High School Students Who Have Smoked Cigars in the Past 30 Days by Demographic Characteristics, YTS 2004

### DT. 4-10 Percentage of Middle and High School Students Who Have Used Smokeless Tobacco in the Past 30 Days by Demographic Characteristics, YTS 2004

Category	Estimate	C.I.	Ν
Middle School			
Gender*			
Female	1.5%	[0.9-2.3]	1931
Male	3.6%	[2.6-4.9]	1831
Race			
White	1.9%	[1.2-2.8]	1485
Black	2.1%	[1.2-3.5]	773
Hispanic	3.4%	[2.3-4.9]	953
Other	4.4%	[1.6-11.6]	397
Grade			
6th	1.8%	[1.2-2.7]	964
7th	3.1%	[1.8-5.5]	1468
8th	2.5%	[1.6-3.9]	1352
Region			
Rest of State	2.1%	[1.6-2.9]	1992
New York City	3.1%	[2.3-4.2]	1792
High School			
Gender*			
Female	1.6%	[1.0-2.5]	2244
Male	7.1%	[4.9-10.2]	1866
Race*			
White	5.3%	[3.8-7.3]	1950
Black	0.5%	[0.1-4.2]	673
Hispanic	3.6%	[2.1-6.1]	841
Other	1.6%	[1.0-2.5]	553
Crada			
Grade	2.10/		1071
9th	3.1%	[1.8-5.2]	1271
10th	3.2%	[2.2-4.7]	1075
11th	4.7%	[2.9-7.5]	893
12th	5.7%	[3.1-10.2]	907
Region*			
Rest of State	5.3%	[3.8-7.4]	2471
New York City	1.4%	[0.9-2.3]	1675
New TOLK CILY	1.470	[0.9-2.3]	1075

Category	Estimate	C.I.	N
Age			
18-24	62.3%	[51.9-71.6]	170
25-34	53.0%	[44.3-61.4]	244
35-44	54.2%	[46.4-61.8]	334
45-54	55.4%	[46.9-63.7]	310
55-64	65.2%	[55.0-74.2]	186
65 + years	61.3%	[48.7-72.5]	112
Race*			
White (non-Hispanic)	63.3%	[59.0-67.5]	1011
Black (non-Hispanic)	38.8%	[29.3-49.2]	148
Hispanic	44.4%	[32.4-57.1]	119
Other	72.0%	[57.3-83.2]	91
Gender			
Male	58.9%	[53.2-64.4]	600
Female	55.5%	[50.3-60.5]	769
Education*			
Less Than High School	42.6%	[31.9-54.1]	154
High School	57.5%	[50.9-63.8]	494
Some College	57.7%	[50.8-64.3]	406
College Degree or More	66.9%	[59.2-73.8]	314
Region*			
Western	79.3%	[71.9-85.1]	319
Central	70.1%	[60.1-78.5]	187
Capital	53.4%	[43.0-63.5]	191
Metro	48.7%	[43.4-54.0]	672
Insurance			
Public	51.5%	[43.7-59.2]	324
Private	61.1%	[56.0-65.9]	748
None	58.0%	[49.1-66.3]	269

# DT. 4-14 Percentage of Smokers Who Purchased from Any Low- or Untaxed Venue by Demographic Characteristics, ATS 2004

	• •	
Estimate	C.I.	N
		170
		243
		332
		308
		184
45.6%	[34.1-57.6]	112
41.1%	[37.3-45.1]	1004
12.9%	[7.7-20.7]	148
14.1%	[6.5-27.9]	119
27.0%	[16.2-41.4]	91
30.5%	[26.1-35.4]	599
33.5%	[29.3-37.9]	763
21.3%	[13.8-31.3]	154
34.7%	[29.4-40.5]	490
37.5%	[31.5-44.0]	404
27.3%	[21.3-34.1]	313
74.8%	[67.4-81.0]	314
		187
27.8%		190
15.9%	[12.5-19.9]	671
33.0%	[26.4-40.3]	323
		744
		267
	12.9% 14.1% 27.0% 30.5% 33.5% 21.3% 34.7% 37.5% 27.3% 74.8% 50.6% 27.8%	28.3%         [20.6-37.5]           25.2%         [19.2-32.2]           32.3%         [26.0-39.3]           34.5%         [27.3-42.5]           39.8%         [30.7-49.7]           45.6%         [34.1-57.6]           41.1%         [37.3-45.1]           12.9%         [7.7-20.7]           14.1%         [6.5-27.9]           27.0%         [16.2-41.4]           30.5%         [26.1-35.4]           33.5%         [29.3-37.9]           21.3%         [13.8-31.3]           34.7%         [29.4-40.5]           37.5%         [31.5-44.0]           27.3%         [21.3-34.1]           27.3%         [21.3-34.1]           33.0%         [20.5-36.4]           15.9%         [12.5-19.9]           33.0%         [26.4-40.3]           32.6%         [28.4-37.1]

#### DT. 4-15a Percentage of Smokers Who Purchased At Least Once from an Indian Reservation in the Past 12 Months by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	N
Age			
18-24	40.1%	[31.1-49.9]	170
25-34	30.7%	[23.4-39.1]	243
35-44	28.8%	[22.7-35.8]	332
45-54	25.7%	[19.6-32.9]	310
55-64	34.3%	[24.8-45.1]	183
65 + years	27.0%	[16.9-40.4]	111
Race*			
White (non-Hispanic)	31.4%	[27.6-35.5]	1004
Black (non-Hispanic)	25.6%	[17.8-35.4]	148
Hispanic	29.3%	[19.8-41.1]	119
Other	51.3%	[36.4-66.0]	91
Gender			
Male	33.8%	[28.9-39.2]	595
Female	28.7%	[24.4-33.5]	767
Education*			
Less Than High School	23.1%	[15.0-33.7]	152
High School	25.7%	[20.6-31.5]	492
Some College	30.7%	[24.9-37.2]	405
College Degree or More	48.5%	[40.9-56.2]	312
Region*			
Western	20.2%	[14.9-26.8]	319
Central	31.5%	[23.1-41.3]	186
Capital	26.5%	[19.0-35.6]	189
Metro	35.7%	[30.9-40.9]	668
Wetto	00.770		000
Insurance*			
Public	25.2%	[19.2-32.3]	322
Private	36.9%	[32.1-42.1]	745
None	29.4%	[22.7-37.1]	269

#### DT. 4-15b Percentage of Smokers Who Purchased At Least Once from Out of State in the Past 12 Months by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	N
Age			
18-24	6.6%	[3.5-11.9]	170
25-34	9.1%	[5.5-14.9]	244
35-44	11.6%	[7.5-17.5]	332
45-54	8.8%	[5.7-13.3]	309
55-64	11.1%	[6.5-18.2]	185
65 + years	5.7%	[1.5-19.0]	112
Race			
White (non-Hispanic)	10.1%	[7.9-12.7]	1007
Black (non-Hispanic)	4.3%	[1.8-9.9]	148
Hispanic	6.7%	[2.7-15.4]	119
Other	17.4%	[8.5-32.3]	91
Gender			
Male	10.6%	[7.7-14.3]	597
Female	7.5%	[5.6-9.9]	768
Education*			
Less Than High School	2.9%	[1.2-6.9]	153
High School	9.8%	[6.8-13.9]	493
Some College	7.5%	[5.2-10.7]	405
College Degree or More	14.3%	[9.4-21.2]	313
Region*			
Western	3.5%	[1.4-8.2]	318
Central	13.3%	[8.1-21.0]	187
Capital	16.8%	[10.6-25.5]	191
Metro	8.6%	[6.3-11.7]	669
Insurance*			
Public	5.3%	[3.1-8.9]	324
Private	13.0%	[10.0-16.8]	747
None	5.6%	[3.0-10.3]	268

#### DT. 4-15c Percentage of Smokers Who Purchased At Least Once from the Internet in the Past 12 Months by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	Ν
Age*			
18-24	4.0%	[1.4-11.0]	170
25-34	3.0%	[1.5-6.0]	243
35-44	3.3%	[1.6-6.8]	331
45-54	5.7%	[3.2-10.0]	307
55-64	14.3%	[8.8-22.3]	185
65 + years	13.6%	[8.0-22.1]	112
Race*			
White (non-Hispanic)	7.3%	[5.5-9.7]	1004
Black (non-Hispanic)	2.0%	[0.9-4.7]	148
Hispanic	4.0%	[1.2-12.0]	119
Other	1.6%	[0.6-4.0]	90
Gender			
Male	5.6%	[3.6-8.5]	595
Female	5.7%	[4.1-7.8]	766
Education			
Less Than High School	4.6%	[2.2-9.4]	152
High School	7.8%	[5.1-11.8]	492
Some College	3.6%	[2.2-5.9]	403
College Degree or More	5.0%	[2.8-8.6]	313
Region			
Western	3.1%	[1.4-6.4]	318
Central	6.2%	[2.5-14.4]	185
Capital	7.9%	[4.5-13.5]	191
Metro	5.9%	[4.1-8.4]	667
Insurance			
Public	7.6%	[5.1-11.2]	324
Private	5.3%	[3.6-7.9]	744
None	5.0%	[2.4-10.0]	268

DT. 4-15d Percentage of Smokers Who Purchased At Least Once from a Toll Free Number in the Past 12 Months by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	Ν
Age	Lotiniato	0.111	
18-24	9.9%	[5.7-16.6]	168
25-34	16.6%	[11.1-24.1]	244
35-44	15.1%	[10.8-20.7]	332
45-54	12.7%	[8.5-18.5]	305
55-64	20.6%	[13.5-30.0]	182
65 + years	12.0%	[5.9-22.8]	109
Race			
White (non-Hispanic)	16.5%	[13.6-19.9]	999
Black (non-Hispanic)	9.3%	[5.0-16.7]	146
Hispanic	8.0%	[4.0-15.5]	118
Other	16.6%	[8.0-31.2]	90
Gender			
Male	15.6%	[12.2-19.8]	593
Female	12.6%	[9.8-16.0]	760
Education			
Less Than High School	8.7%	[4.6-16.0]	152
High School	12.7%	[9.2-17.2]	485
Some College	16.0%	[11.6-21.6]	403
College Degree or More	18.4%	[13.4-24.8]	312
Region			
Western	15.8%	[11.3-21.7]	315
Central	14.5%	[8.5-23.7]	185
Capital	5.7%	[2.6-11.9]	188
Metro	15.1%	[12.0-18.9]	665
Insurance			
Public	10.8%	[7.1-16.0]	317
Private	17.1%	[13.8-21.1]	744
None	12.6%	[8.1-18.9]	264

#### DT. 4-15e Percentage of Smokers Who Purchased At Least Once From a Duty Free Shop in the Past 12 Months by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	Ν
Age			
18-24	28.9%	[21.4-37.9]	170
25-34	38.6%	[30.8-47.0]	244
35-44	34.9%	[28.5-41.9]	332
45-54	40.8%	[33.0-49.1]	309
55-64	46.1%	[36.4-56.2]	185
65 + years	47.0%	[35.1-59.1]	112
Race*			
White (non-Hispanic)	44.2%	[40.1-48.3]	1007
Black (non-Hispanic)	18.9%	[12.6-27.2]	148
Hispanic	22.9%	[13.7-35.7]	119
Other	45.6%	[31.5-60.5]	91
Gender			
Male	37.2%	[32.3-42.5]	597
Female	37.2%	[32.7-41.8]	768
Education			
Less Than High School	27.0%	[18.5-37.6]	153
High School	37.7%	[32.1-43.7]	493
Some College	38.9%	[32.8-45.3]	405
College Degree or More	41.4%	[34.1-49.1]	313
Region*			
Western	70.7%	[63.2-77.2]	318
Central	47.6%	[37.8-57.6]	187
Capital	32.1%	[24.1-41.3]	191
Metro	25.7%	[21.6-30.4]	669
Insurance			
Public	35.3%	[28.6-42.6]	324
Private	39.0%	[34.4-43.9]	747
None	39.0%	[29.5-44.4]	268
NOTIE	30.0%	[27.3-44.4]	∠0ŏ

#### DT. 4-16 Percentage of Smokers Who Purchased "All the Time" or "Sometimes" from Any Low- or Untaxed Venue by Demographic Characteristics, ATS 2004

#### DT. 4-17a Percentage of Smokers Who Purchased "All the Time" or "Sometimes" from Indian Reservations in the Past 12 Months by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	Ν
Age*			
18-24	16.4%	[10.4-24.8]	170
25-34	19.7%	[14.4-26.5]	243
35-44	25.6%	[20.1-31.9]	332
45-54	30.2%	[23.3-38.1]	308
55-64	33.0%	[24.7-42.5]	184
65 + years	33.3%	[23.3-45.0]	112
Desist			
Race*	22.20/	[00 7 05 0]	1004
White (non-Hispanic)	32.2%	[28.7-35.9]	1004
Black (non-Hispanic)	7.3%	[3.8-13.7]	148
Hispanic	12.4%	[5.2-26.7]	119
Other	16.9%	[9.6-28.1]	91
Gender			
Male	23.3%	[19.3-27.9]	599
Female	25.8%	[22.1-29.8]	763
Education			
Less Than High School	17.9%	[11.0-27.9]	154
High School	26.7%	[22.0-31.9]	490
Some College	27.0%	[21.9-32.8]	404
College Degree or More	22.1%	[16.6-28.7]	313
Region*			
Western	68.4%	[60.9-75.1]	314
Central	36.2%	[27.4-46.1]	187
Capital	19.9%	[14.0-27.5]	190
Metro	9.6%	[7.0-13.1]	671
Insurance			
Public	24.1%	[18.5-30.9]	323
Private	24.8%	[21.2-28.9]	744
None	24.4%	[18.7-31.1]	267

Category	Estimate	C.I.	Ν
Age			
18-24	11.8%	[7.6-18.0]	170
25-34	16.7%	[11.1-24.4]	243
35-44	12.3%	[8.3-17.7]	332
45-54	9.5%	[6.2-14.3]	310
55-64	11.6%	[6.8-19.1]	182
65 + years	13.9%	[6.8-26.2]	110
Race			
White (non-Hispanic)	12.2%	[9.7-15.2]	1002
Black (non-Hispanic)	10.1%	[5.9-17.0]	148
Hispanic	11.8%	[6.4-20.9]	119
Other	23.5%	[13.3-38.2]	91
Gender*			
Male	14.7%	[11.4-18.8]	595
Female	10.1%	[7.7-13.1]	765
Education*			
Less Than High School	8.1%	[4.2-15.0]	151
High School	10.1%	[7.2-14.0]	492
Some College	11.6%	[8.3-16.1]	404
College Degree or More	21.2%	[15.3-28.6]	312
Region*			
Western	4.9%	[2.8-8.5]	319
Central	13.6%	[8.8-20.3]	185
Capital	11.1%	[6.4-18.6]	189
Metro	14.9%	[11.8-18.8]	667
Insurance			
Public	11.5%	[7.7-16.7]	321
Private	13.6%	[10.5-17.5]	744
None	12.6%	[8.5-18.2]	269

#### DT. 4-17b Percentage of Smokers Who Purchased "All the Time" or "Sometimes" from Out of State in the Past 12 Months by Demographic Characteristics, ATS 2004

N 70 44 32
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37
91
68
24
47
68

#### DT. 4-17c Percentage of Smokers Who Purchased "All the Time" or "Sometimes" from the Internet in the Past 12 Months by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	Ν
Age*			
18-24	0.7%	[0.1-5.1]	170
25-34	2.3%	[1.0-5.2]	243
35-44	1.5%	[0.7-3.2]	331
45-54	4.6%	[2.3-9.0]	306
55-64	10.7%	[6.2-18.0]	185
65 + years	11.6%	[6.5-19.6]	112
¥			
Race*			
White (non-Hispanic)	5.2%	[3.8-7.2]	1003
Black (non-Hispanic)	1.2%	[0.4-3.3]	148
Hispanic	0.4%	[0.1-2.0]	119
Other	1.4%	[0.5-3.9]	90
Gender			
Male	3.0%	[1.8-4.7]	595
Female	4.5%	[3.0-6.5]	765
Education			
Less Than High School	2.6%	[1.1-6.2]	152
High School	5.2%	[3.4-7.8]	491
Some College	2.5%	[1.4-4.4]	403
College Degree or More	3.2%	[1.5-6.8]	313
Region			
Western	2.7%	[1.1-6.1]	318
Central	3.4%	[1.5-7.4]	185
Capital	7.1%	[3.9-12.5]	191
Metro	3.4%	[2.2-5.2]	666
Insurance*			
Public	5.8%	[3.7-9.0]	324
Private	3.9%	[2.4-6.0]	743
None	1.8%	[0.8-3.6]	268

#### DT. 4-17d Percentage of Smokers Who Purchased "All the Time" or "Sometimes" from a Toll Free Number in the Past 12 Months by Demographic Characteristics, ATS 2004

<u>Octoore</u>	E . Para at a	0.1	NI
Category	Estimate	C.I.	N
Age	0.00/	[4 0 4 0]	4 ( 0
18-24	2.2%	[1.0-4.9]	168
25-34	8.6%	[4.9-14.5]	244
35-44	6.5%	[4.0-10.4]	332
45-54	7.0%	[4.0-12.0]	305
55-64	8.6%	[4.4-15.8]	182
65 + years	4.7%	[2.1-10.3]	109
Race			
White (non-Hispanic)	7.5%	[5.6-9.8]	999
Black (non-Hispanic)	4.2%	[1.8-9.4]	146
Hispanic	2.2%	[0.5-8.6]	118
Other	6.8%	[2.5-17.4]	90
Gender			
Male	6.4%	[4.4-9.1]	593
Female	5.9%	[4.1-8.3]	760
Education			
Less Than High School	5.3%	[2.4-11.6]	152
High School	6.4%	[4.2-9.7]	485
Some College	5.3%	[3.2-8.5]	403
College Degree or More	7.4%	[4.5-11.9]	312
Region			
Western	8.6%	[5.5-13.2]	315
Central	8.8%	[4.5-16.5]	185
Capital	2.2%	[0.6-7.2]	188
Metro	5.6%	[3.9-8.0]	665
Insurance			
Public	5.3%	[3.1-8.8]	317
Private	7.7%	[5.6-10.5]	744
None	4.7%	[2.3-9.2]	264
	4.//0	[2.3-7.2]	204

#### DT. 4-17e Percentage of Smokers Who Purchased "All the Time" or "Sometimes" Duty Free in the Past 12 Months by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	Ν
Age*			
18-24	7.6	[5.3-9.9]	541
25-34	4.2	[3.2-5.2]	1218
35-44	4.3	[3.1-5.5]	1581
45-54	4.0	[2.9-5.1]	1598
55-64	3.4	[2.3-4.5]	1335
65 + years	1.7	[1.2-2.2]	1607
Race			
White (non-Hispanic)	4.4	[3.8-5.0]	6010
Black (non-Hispanic)	3.2	[1.9-4.4]	789
Hispanic	2.9	[1.9-4.0]	743
Other	4.6	[2.5-6.7]	512
Gender*			
Male	4.7	[3.9-5.5]	3107
Female	3.4	[2.8-4.0]	4944
Education*			
Less Than High School	7.8	[4.9-10.7]	627
High School	5.2	[4.1-6.2]	2134
Some College	5.1	[4-6.3.0]	1942
College Degree or More	1.7	[1.4-2.0]	3314
Region*			
Western	7.1	[5.3-8.9]	1682
Central	7.5	[5.3-9.6]	925
Capital	5.0	[2.9-7.0]	923
Metro	2.8	[2.3-3.2]	4517
	2.0	[2.3-3.2]	4317
Insurance*			
Public	4.0	[3.0-5.1]	1900
Private	3.0	[2.5-3.5]	5016
None	7.9	[5.9-9.9]	949

#### DT. 4-28 Average Number of Hours in the Past 7 Days That Adults Spent in a Room Where Someone was Smoking by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	N
Age*	201111410		
18-24	3.0	[1.7-4.4]	552
25-34	1.0	[0.7-1.3]	1232
35-44	1.1	[0.7-1.5]	1597
45-54	0.5	[0.4-0.7]	1618
55-64	0.7	[0.3-1.0]	1348
65 + years	0.3	[0.2-0.5]	1632
Race		[0.0.4.4]	(000
White (non-Hispanic)	1.1	[0.8-1.4]	6090
Black (non-Hispanic)	0.9	[0.5-1.3]	798
Hispanic	0.8	[0.4-1.3]	751
Other	0.6	[0.3-1.0]	517
Gender*			
Male	1.5	[1.1-1.9]	3154
Female	0.6	[0.5-0.8]	4999
Education*			
	2.1	[0 4 2 5]	638
Less Than High School High School	1.3	[0.6-3.5] [1.0-1.6]	2171
Some College	1.3	[0.8-1.8]	1967
College Degree or More	0.4	[0.3-0.5]	3343
	0.4	[0.3-0.3]	5545
Region*			
Western	1.6	[1.0-2.3]	1690
Central	1.5	[0.9-2.1]	939
Capital	2.3	[0.6-4.1]	943
Metro	0.7	[0.5-0.8]	4584
Insurance*	0.7		1000
Public	0.7	[0.5-0.9]	1932
Private	0.7	[0.5-0.9]	5068
None	2.4	[1.4-3.4]	962

#### DT. 4-29 Average Number of Hours in the Past 7 Days That Adults Spent in a Vehicle Where Someone was Smoking by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	Ν
Age*			
18-24	1.9	[1.3-2.6]	339
25-34	1.5	[1-1.9]	900
35-44	0.8	[0.6-1]	1180
45-54	0.9	[0.5-1.2]	1221
55-64	0.7	[0.5-0.9]	1102
65 + years	0.5	[0.4-0.7]	1463
Race*			
White (non-Hispanic)	1.0	[0.8-1.2]	4762
Black (non-Hispanic)	0.5	[0.3-0.7]	608
Hispanic	1.0	[0.7-1.4]	583
Other	1.5	[0.7-2.4]	407
Gender*			
Male	1.2	[1-1.4]	2375
Female	0.8	[0.6-0.9]	3983
Education			
Education	0.0	[0 4 1 1]	420
Less Than High School	0.8	[0.4-1.1]	430
High School	1.0	[0.7-1.3]	1542
Some College	1.2	[0.9-1.6]	1455
College Degree or More	0.8	[0.6-1]	2900
Region			
Western	1.1	[0.8-1.4]	1278
Central	1.4	[0.9-2.0]	692
Capital	1.5	[0.8-2.2]	710
Metro	0.8	[0.7-1.0]	3680
Insurance*	0.7		1520
Public	0.7	[0.5-0.9]	1520
Private	1.0	[0.8-1.2]	4068
None	1.3	[0.9-1.7]	617

#### DT. 4-30 Average Number of Hours in the Past 7 Days That Adult Nonsmokers Spent in a Room Where Someone was Smoking by Demographic Characteristics, ATS 2004

Demographic Characteristics, ATS 2004				
Category	Estimate	C.I.	Ν	
Age				
18-24	22.1	[14.9-29.2]	202	
25-34	15.1	[10.7-19.5]	314	
35-44	18.3	[13.1-23.5]	397	
45-54	19.0	[13.3-24.6]	375	
55-64	21.3	[13.9-28.6]	227	
65 + years	19.4	[13.5-25.2]	137	
Race*				
White (non-Hispanic)	20.9	[17.7-24]	1229	
Black (non-Hispanic)	15.0	[8.9-21]	175	
Hispanic	12.0	[6.4-17.6]	160	
Other	24.5	[11.7-37.2]	104	
Gender				
Male	19.7	[16-23.4]	720	
Female	17.8	[14.5-21.2]	947	
Education*				
Less Than High School	26.1	[16.9-35.3]	196	
High School	19.0	[14.9-23]	587	
Some College	22.1	[17.1-27]	483	
College Degree or More	9.8	[7.4-12.1]	399	
Region*				
Western	29.7	[22.6-36.9]	400	
Central	27.7	[19.7-35.7]	230	
Capital	17.0	[8.9-25.2]	219	
Metro	13.9	[11.2-16.6]	819	
Insurance*				
Public	20.0	[14.6-25.5]	374	
Private	15.3	[12.3-18.2]	934	
None	25.2	[19-31.5]	328	

#### DT. 4-31 Average Number of Hours in the Past 7 Days That Adult Smokers Spent in a Room Where Someone was Smoking by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	Ν
Age*			
18-24	0.8	[0.3-1.3]	343
25-34	0.5	[0.2-0.8]	908
35-44	0.2	[0.1-0.4]	1185
45-54	0.1	[0.1-0.2]	1226
55-64	0.1	[0-0.2]	1104
65 + years	0.1	[0.1-0.2]	1473
Race			
White (non-Hispanic)	0.2	[0.1-0.3]	4788
Black (non-Hispanic)	0.4	[0.1-0.7]	610
Hispanic	0.3	[0.1-0.5]	587
Other	0.3	[0-0.5]	410
Gender*			
Male	0.4	[0.3-0.6]	2392
Female	0.2	[0.1-0.2]	4001
Education			
Less Than High School	0.3	[0.1-0.4]	431
High School	0.3	[0.1-0.4]	1553
Some College	0.5	[0.2-0.7]	1463
College Degree or More	0.2	[0.1-0.3]	2915
Region			
Western	0.2	[0.1-0.3]	1279
Central	0.2	[0.1-0.3]	698
Capital	0.6	[0-1.1]	712
Metro	0.3	[0.2-0.4]	3706
Insurance			
Public	0.3	[0.1-0.4]	1530
Private	0.2	[0.1-0.3]	4088
None	0.6	[0.2-1]	621

#### DT. 4-32 Average Number of Hours in the Past 7 Days That Adult Nonsmokers Spent in a Vehicle Where Someone was Smoking by Demographic Characteristics, ATS 2004

DT. 4-33 Average Number of Hours in the Past 7 Days That Adult
Smokers Spent in a Vehicle Where Someone was Smoking by
Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	Ν
Age*			
18-24	8.5	[4.2-12.8]	209
25-34	3.1	[2.1-4.0]	320
35-44	4.5	[2.7-6.3]	407
45-54	2.4	[1.8-3.1]	390
55-64	4.2	[1.9-6.5]	238
65 + years	3.1	[0.8-5.4]	151
Race			
White (non-Hispanic)	5.4	[3.9-6.9]	1281
Black (non-Hispanic)	2.8	[1.0-4.7]	182
Hispanic	3.3	[1.1-5.6]	164
Other	3.1	[1.5-4.8]	106
Condor*			
Gender* Male	5.9	[4 0 7 9]	749
Female	3.1	[4.0-7.8] [2.3-3.9]	983
генае	3.1	[2.3-3.9]	903
Education*			
Less Than High School	6.7	[1.7-11.7]	205
High School	4.7	[3.5-6.0]	612
Some College	4.9	[2.7-7.1]	500
College Degree or More	2.4	[1.6-3.1]	413
Region*			
Western	6.8	[3.9-9.7]	407
Central	5.8	[3.2-8.4]	237
Capital	8.3	[1.3-15.2]	237
Metro	2.9	[2.2-3.7]	859
	2.7	[2.2-3.7]	007
Insurance*			
Public	2.7	[1.8-3.7]	395
Private	3.9	[2.6-5.1]	965
None	7.4	[4.0-10.8]	337

Category	Estimate	C.I.	N
Middle School			
Gender*			
Female	1.9	[1.7-2.2]	1931
Male	1.6	[1.4-1.9]	1795
Race*			
White	2.0	[1.6-2.3]	1478
Black	1.5	[1.3-1.8]	758
Hispanic	1.5	[1.3-1.7]	937
Other	1.8	[1.3-2.3]	403
Grade*			
6th	1.5	[1.2-1.8]	943
7th	1.8	[1.4-2.1]	1461
8th	2.0	[1.7-2.4]	1344
Region*			
Rest of State	1.9	[1.7-2.2]	1984
New York City	1.5	[1.3-1.8]	1764
High School			
Gender*			
Female	2.5	[2.2-2.8]	2242
Male	2.1	[1.9-2.4]	1886
Race*			
White	2.6	[2.4-2.9]	1973
Black	1.6	[1.4-1.8]	659
Hispanic	2.0	[1.7-2.4]	852
Other	1.7	[1.4-1.9]	557
Grade			
9th	2.1	[1.9-2.3]	1286
10th	2.3	[1.9-2.6]	1077
11th	2.5	[2.2-2.8]	896
12th	2.6	[2.1-3.1]	907
Region*			
Rest of State	2.5	[2.2-2.8]	2499
New York City	1.9	[1.7-2.2]	1667

#### DT. 4-34 Number of Days in the Past Week Middle and High School Students Were in a Room with a Smoker by Demographic Characteristics, YTS 2004

DT. 4-35 Number of Days in the Past Week Middle and High School
Students Were in a Car with a Smoker by Demographic
Characteristics, YTS 2004

Category	Estimate	C.I.	Ν
Middle School			
Gender*			
Female	1.3	[1.1-1.6]	1934
Male	1.1	[0.9-1.3]	1807
Race*			
White	1.4	[1.1-1.7]	1486
Black	0.7	[0.5-0.9]	757
Hispanic	1.0	[0.8-1.1]	945
Other	1.1	[0.7-1.5]	402
Grade			
6th	1.1	[0.9-1.3]	950
7th	1.2	[0.9-1.5]	1464
8th	1.3	[0.9-1.7]	1348
Region*			
Rest of State	1.4	[1.1-1.6]	1995
New York City	0.9	[0.7-1.1]	1767
High School			
Gender			
Female	1.5	[1.4-1.7]	2246
Male	1.4	[1.3-1.6]	1893
Male	1.4	[1.3-1.0]	1075
Race*			
White	1.8	[1.6-2]	1982
Black	0.8	[0.6-1]	663
Hispanic	1.1	[0.9-1.3]	853
Other	1.0	[0.7-1.2]	554
Grade			
9th	1.3	[1.1-1.5]	1289
10th	1.4	[1.2-1.6]	1079
11th	1.7	[1.5-1.9]	899
12th	1.8	[1.4-2.2]	910
Region*			
Rest of State	1.8	[1.6-1.9]	2508
New York City	1.0	[0.8-1.2]	1669

### DT. 4-36a/37a Number of Days in the Past Week Middle and High School Students Who Live With a Smoker Were in a Room with a Smoker by Demographic Characteristics, YTS 2004

Category	Estimate	C.I.	Ν
Middle School			
Gender*			
Female	3.7	[3.3-4]	799
Male	3.1	[2.8-3.5]	701
Race*			
White	3.8	[3.4-4.1]	608
Black	2.8	[2.3-3.3]	286
Hispanic	2.7	[2.4-2.9]	379
Other	3.4	[2.4-4.3]	157
Grade*			
6th	3.0	[2.6-3.5]	382
7th	3.3	[2.9-3.7]	589
8th	3.9	[3.4-4.4]	534
Region*			
Rest of State	3.8	[3.4-4.1]	787
New York City	2.8	[2.4-3.1]	718
High School			
Gender*			
Female	4.3	[3.9-4.7]	875
Male	3.5	[3.1-4]	690
Race*			
White	4.4	[4-4.9]	762
Black	2.9	[2.4-3.5]	220
Hispanic	3.3	[2.9-3.7]	347
Other	3.1	[2.1-4.1]	198
Grade			
9th	3.7	[3.3-4]	501
10th	4.0	[3.5-4.6]	394
11th	4.4	[3.8-4.9]	331
12th	3.9	[3.3-4.5]	353
Region*			
Rest of State	4.2	[3.7-4.6]	947
New York City	3.5	[3.2-3.8]	632

#### DT. 4-36b/37b Number of Days in the Past Week Middle and High School Students Who Do Not Live With a Smoker Were in a Room with a Smoker by Demographic Characteristics, YTS 2004

Category	Estimate	C.I.	Ν
Middle School			
Gender			
Female	0.7	[0.6-0.8]	1097
Male	0.7	[0.5-0.8]	1044
Race			
White	0.7	[0.5-0.8]	858
Black	0.7	[0.5-0.8]	438
Hispanic	0.7	[0.5-0.9]	533
Other	0.7	[0.5-1]	235
Grade			
6th	0.5	[0.4-0.7]	538
7th	0.7	[0.5-0.9]	829
8th	0.8	[0.6-0.9]	791
Region			
Rest of State	0.7	[0.5-0.8]	1170
New York City	0.7	[0.5-0.8]	988
High School			
Gender			
Female	1.3	[1.2-1.5]	1351
Male	1.3	[1.1-1.5]	1163
Race*			
White	1.5	[1.4-1.6]	1200
Black	0.9	[0.7-1.2]	422
Hispanic	1.1	[0.9-1.4]	490
Other	0.9	[0.6-1.2]	354
Grade*			
9th	1.1	[0.9-1.2]	768
10th	1.3	[1.1-1.5]	672
11th	1.4	[1.2-1.6]	558
12th	1.7	[1.4-2.1]	539
Region*			
Rest of State	1.5	[1.4-1.6]	1539
New York City	1.0	[0.8-1.2]	998

DT. 4-38a/39a Number of Days in the Past Week Middle and High
School Students Who Live With a Smoker Were in a Car With a
Smoker by Demographic Characteristics, YTS 2004

Category	Estimate	C.I.	Ν
Middle School			
Gender*			
Female	2.8	[2.3-3.2]	800
Male	2.3	[1.9-2.6]	705
Race*			
White	3.1	[2.6-3.5]	611
Black	1.5	[1.1-1.9]	285
Hispanic	1.7	[1.4-2]	382
Other	2.2	[1.2-3.1]	158
Grade			
6th	2.4	[2-2.8]	385
7th	2.5	[2.1-2.9]	590
8th	2.7	[2-3.3]	535
Region*			
Rest of State	3.0	[2.6-3.4]	791
New York City	1.6	[1.1-2.1]	719
High School			
Gender			
Female	2.8	[2.5-3.1]	874
Male	2.6	[2.2-2.9]	695
Race*			
White	3.3	[3-3.6]	765
Black	1.6	[1.2-2.1]	221
Hispanic	1.8	[1.4-2.2]	349
Other	1.9	[1.2-2.6]	196
Grade			
9th	2.6	[2.2-2.9]	502
10th	2.6	[2.2-3.1]	395
11th	3.0	[2.6-3.4]	332
12th	2.7	[2.1-3.2]	354
Region*			
Rest of State	3.1	[2.9-3.4]	950
New York City	1.8	[1.4-2.2]	633

#### DT. 4-38b/39b Number of Days in the Past Week Middle and High School Students Who Do Not Live With a Smoker Were in a Car With a Smoker by Demographic Characteristics, YTS 2004

Category	Estimate	C.I.	N
Middle School			
Gender			
Female	0.3	[0.2-0.4]	1101
Male	0.3	[0.2-0.4]	1051
Race			
White	0.3	[0.2-0.4]	863
Black	0.3	[0.2-0.4]	438
Hispanic	0.5	[0.3-0.6]	539
Other	0.4	[0.1-0.6]	234
Crada			
Grade 6th	0.2	[0 2 0 2]	542
7th	0.2	[0.2-0.3]	832
8th		[0.2-0.5]	
8th	0.4	[0.2-0.5]	794
Region			
Rest of State	0.3	[0.2-0.4]	1177
New York City	0.4	[0.3-0.4]	991
High School			
Gender			
Female	0.7	[0.6-0.9]	1356
Male	0.8	[0.6-0.9]	1172
Race*			
White	0.9	[0.8-1]	1206
Black	0.4	[0.3-0.6]	428
Hispanic	0.6	[0.5-0.7]	491
Other	0.5	[0.3-0.7]	355
Crada*			
Grade*	0.5	[0,2,0,4]	770
9th	0.5	[0.3-0.6]	773
10th	0.7	[0.5-0.8]	675
11th	0.9	[0.7-1.1]	560
12th	1.2	[0.9-1.5]	543
Region*			
Rest of State	0.9	[0.8-1]	1545
New York City	0.5	[0.4-0.6]	1006

Category	Estimate	C.I.	Ν
Age*			
18-24	14.6%	[9.7-21.2]	233
25-34	14.5%	[10.6-19.4]	732
35-44	7.1%	[5.1-9.8]	940
45-54	9.2%	[6.5-12.8]	959
55-64	6.4%	[3.7-10.9]	545
65 + years	9.8%	[4.2-21.3]	151
Race*			
White (non-Hispanic)	7.7%	[6.3-9.4]	2720
Black (non-Hispanic)	10.0%	[6.4-15.4]	342
Hispanic	18.4%	[12.6-26.1]	342
Other	14.6%	[12.0-20.1]	242
Other	14.076	[0.7-23.4]	242
Gender*			
Male	14.2%	[11.6-17.3]	1332
Female	6.3%	[4.9-8.0]	2284
Education*			
Less Than High School	20.8%	[13.8-30.3]	144
High School	12.1%	[8.7-16.7]	766
Some College	10.1%	[7.2-13.9]	864
College Degree or More	7.8%	[6.0-10.2]	1832
Region*			
Western	7.3%	[5.2-10.1]	759
Central	7.2%	[4.0-12.5]	400
Capital	6.4%	[3.6-10.9]	465
Metro	11.6%	[9.5-14.0]	1992
Insurance*			
Public	13.5%	[8.5-20.7]	234
Private	7.6%	[6.3-9.2]	3000
None	23.3%	[16.6-31.8]	320

#### DT. 4-40 Percentage of Indoor Workers Who Reported Seeing Smoking in their Work Area in the Past Week by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	Ν
Age*			
18-24	67.9%	[58.5-76.1]	230
25-34	77.3%	[72.1-81.9]	733
35-44	82.6%	[78.9-85.9]	937
45-54	86.3%	[82.7-89.2]	955
55-64	86.8%	[81.5-90.8]	542
65 + years	78.6%	[66.7-87.1]	151
Race*			
White (non-Hispanic)	85.0%	[82.9-86.9]	2716
Black (non-Hispanic)	76.2%	[68.3-82.6]	342
Hispanic	73.3%	[65.6-79.9]	308
Other	71.5%	[61.8-79.6]	238
Gender*			
Male	78.2%	[74.6-81.4]	1330
Female	83.9%	[81.5-86.0]	2274
Education*			
Less Than High School	58.3%	[46.8-69.0]	140
High School	76.3%	[71.1-80.8]	765
Some College	79.9%	[75.0-84.0]	863
College Degree or More	86.3%	[83.6-88.6]	1826
Region*			
Western	86.4%	[82.4-89.5]	760
Central	83.6%	[77.5-88.3]	396
Capital	77.3%	[70.8-82.7]	464
Metro	80.2%	[77.3-82.8]	1984
Wetto	00.270	[,,	1707
Insurance*			
Public	62.8%	[51.9-72.6]	235
Private	85.8%	[83.8-87.5]	2992
None	65.7%	[57.6-73.1]	319

# DT. 4-41 Percentage of Indoor Workers with Smoke-Free Workplaces by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	Ν
Age*			
18-24	7.5%	[5.1-11.0]	446
25-34	3.0%	[1.9-4.8]	1011
35-44	5.1%	[3.5-7.3]	1305
45-54	4.2%	[2.8-6.2]	1295
55-64	2.4%	[1.4-4.0]	1067
65 + years	4.6%	[3.3-6.3]	1197
Race*			
White (non-Hispanic)	2.9%	[2.4-3.6]	5059
Black (non-Hispanic)	6.9%	[4.4-10.8]	496
Hispanic	8.4%	[5.8-11.9]	505
Other	7.9%	[4.7-13.0]	385
Gender			
Male	5.0%	[3.9-6.4]	2570
Female	3.9%	[3.1-4.9]	3873
Education			
	( 00(	[4 0 11 0]	220
Less Than High School	6.9%	[4.0-11.8]	338
High School	5.5%	[4.0-7.4]	1613
Some College	4.5%	[3.3-6.1]	1582
College Degree or More	3.5%	[2.6-4.6]	2888
Region*			
Western	3.3%	[2.3-4.7]	1415
Central	3.5%	[2.1-5.7]	737
Capital	2.2%	[1.2-3.8]	764
Metro	5.1%	[4.2-6.3]	3529
Insurance*			
Public	7.6%	[5.7-10.0]	1357
Private	3.1%	[2.4-3.9]	4274
None	6.4%	[4.2-9.6]	677

# DT. 4-45 Percentage of Restaurant Patrons Who Saw Smoking Indoors in the Past 30 Days by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	Ν
Age*			
18-24	26.3%	[19.5-34.4]	207
25-34	17.7%	[13.1-23.5]	413
35-44	17.6%	[12.6-23.9]	327
45-54	17.2%	[11.5-24.8]	301
55-64	10.5%	[6.1-17.4]	187
65 + years	23.2%	[14.2-35.4]	102
Race*			
White (non-Hispanic)	18.0%	[15.2-21.2]	1268
Black (non-Hispanic)	19.6%	[11.2-32.0]	85
Hispanic	15.8%	[9.3-25.5]	123
Other	40.6%	[26.3-56.8]	88
- Othor	10.070	[20:0 00:0]	
Gender*			
Male	21.8%	[18.0-26.1]	817
Female	15.3%	[12.1-19.1]	746
Education			
Less Than High School	34.3%	[21.1-50.5]	70
High School	19.1%	[14.2-25.1]	341
Some College	19.2%	[14.2-25.3]	390
College Degree or More	17.7%	[13.9-22.3]	759
Region			
Western	14.0%	[10.1-19.1]	377
Central	21.1%	[14.5-29.7]	198
Capital	17.3%	[11.1-25.8]	179
Metro	20.9%	[17.2-25.1]	810
	20.770		010
Insurance*			
Public	28.1%	[19.5-38.7]	191
Private	15.8%	[12.9-19.1]	1137
None	27.8%	[20.2-37.0]	204

# DT. 4-46 Percentage of Bar Patrons Who Saw Smoking Indoors in the Past 30 Days by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	Ν
Age*			
18-24	60.9%	[55.1-66.5]	551
25-34	72.1%	[68.5-75.5]	1239
35-44	74.4%	[71.4-77.2]	1589
45-54	72.9%	[69.9-75.7]	1605
55-64	73.9%	[70.6-77.0]	1341
65 + years	75.5%	[72.6-78.2]	1607
Race*			
	70 69/	[40 0 72 2]	6062
White (non-Hispanic)	70.6%	[69.0-72.2]	6063
Black (non-Hispanic)	70.3%	[65.6-74.5]	790
Hispanic	79.5%	[75.1-83.3]	746
Other	75.7%	[70.2-80.5]	508
Gender*			
Male	67.8%	[65.4-70.1]	3149
Female	76.3%	[74.6-77.9]	4955
Education *			
Education*	71 40/		( ) )
Less Than High School	71.4%	[66.1-76.1]	632
High School	64.6%	[61.7-67.5]	2164
Some College	68.3%	[65.2-71.2]	1954
College Degree or More	79.9%	[77.9-81.8]	3321
Region*			
Western	64.5%	[61.3-67.6]	1672
Central	62.8%	[58.5-67.0]	943
Capital	69.5%	[65.1-73.5]	941
Metro	75.5%	[73.7-77.2]	4551
Insurance*			
Public	69.0%	[65.8-72.0]	1918
Private	75.1%	[73.4-76.7]	5034
None	67.4%	[63.1-71.5]	963

# DT. 4-48 Percentage of Adults Who Favor the Clean Indoor Air Act by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	Ν
Age*			
18-24	74.2%	[66.7-80.4]	337
25-34	80.4%	[76.4-83.9]	903
35-44	84.2%	[81.2-86.9]	1174
45-54	81.0%	[77.9-83.8]	1210
55-64	81.7%	[78.4-84.6]	1091
65 + years	78.9%	[75.9-81.6]	1441
Race*			
White (non-Hispanic)	79.7%	[78.1-81.3]	4728
Black (non-Hispanic)	77.8%	[72.6-82.3]	600
Hispanic	86.1%	[81.5-89.7]	579
Other	81.8%	[76.2-86.3]	401
Gender*			
Male	76.4%	[73.8-78.8]	2365
Female	84.2%	[82.6-85.7]	3941
Ternale	04.270	[02.0-03.7]	5741
Education*			
Less Than High School	80.8%	[74.7-85.7]	423
High School	76.1%	[72.9-79.1]	1525
Some College	77.0%	[73.6-80.1]	1441
College Degree or More	85.0%	[83.0-86.7]	2888
Region*			
Western	75.8%	[72.3-79.0]	1261
Central	75.9%	[71.3-80.0]	691
Capital	81.7%	[77.4-85.3]	702
Metro	82.0%	[80.1-83.7]	3654
Insurance*			
Public	76.7%	[73.2-79.9]	1498
Private	82.5%	[80.9-84.1]	4044
None	78.9%	[73.9-83.2]	613

## DT. 4-49 Percentage of Adult Nonsmokers Who Favor the Clean Indoor Air Act by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	N
Age			
18-24	29.7%	[22.4-38.2]	214
25-34	39.3%	[32.3-46.7]	331
35-44	35.3%	[28.7-42.5]	410
45-54	36.1%	[28.6-44.4]	393
55-64	25.3%	[18.6-33.4]	244
65 + years	29.3%	[20.8-39.5]	157
Race*			
White (non-Hispanic)	29.0%	[25.7-32.6]	1312
Black (non-Hispanic)	36.5%	[27.2-46.9]	183
Hispanic	49.7%	[39.0-60.5]	167
Other	34.4%	[22.7-48.4]	106
Gender			
Male	32.5%	[27.8-37.5]	769
Female	34.7%	[30.5-39.2]	998
Education*			
Less Than High School	47.2%	[37.1-57.5]	206
High School	29.1%	[24.0-34.7]	633
Some College	32.6%	[27.1-38.7]	509
College Degree or More	32.7%	[27.0-39.1]	417
Region*			
Western	24.1%	[18.9-30.1]	406
Central	20.5%	[14.6-27.9]	248
Capital	30.0%	[23.0-38.2]	238
Metro	39.7%	[35.1-44.6]	876
Insurance			
Public	34.9%	[28.4-42.0]	412
Private	31.6%	[27.7-35.8]	975
None	38.0%	[30.5-46.0]	345

# DT. 4-50 Percentage of Adult Smokers Who Favor the Clean Indoor Air Act by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	Ν
Middle School	LStimate	0.1.	IN
Gender*			
Female	89.8%	[87.9-91.4]	1391
Male	84.1%	[79.2-88.0]	1273
	04.170	[77.2-00.0]	1275
Race*			
White	89.8%	[86.9-92.1]	950
Black	84.4%	[81.2-87.2]	660
Hispanic	83.4%	[78.6-87.3]	737
Other	84.4%	[73.1-91.4]	230
Grade*			
6th	85.7%	[83.1-87.9]	666
7th	84.6%	[79.8-88.4]	1115
8th	91.7%	[87.4-94.6]	901
Region*			
Rest of State	88.8%	[86.2-91.0]	1428
New York City	84.0%	[79.9-87.4]	1254
High School			
Gender*			
Female	94.0%	[92.2-95.4]	1811
Male	89.7%	[87.5-91.6]	1483
Race*			
White	94.1%	[91.7-95.9]	1621
Black	88.8%	[86.2-91.0]	498
Hispanic	88.7%	[85.5-91.2]	661
Other	90.4%	[86.2-93.5]	452
Grade			
9th	90.6%	[86.9-93.4]	954
10th	90.1%	[88.2-91.6]	879
11th	94.6%	[91.2-96.7]	764
12th	94.2%	[89.6-96.8]	728
Deview			
Region	02.00/	[00.2.04.7]	207(
Rest of State	92.8%	[90.3-94.7]	2076
New York City	90.3%	[89.5-91.1]	1249

## DT. 4-51 Middle and High School Students' Awareness of the Clean Indoor Air Act by Demographic Characteristics, YTS 2004

DT. 4-52a Percentage of Middle and High School Students' Who
Favor the Clean Indoor Air Act by Demographic Characteristics,
YTS 2004

Category	Estimate	C.I.	Ν
Middle School			
Gender*			
Female	38.5%	[30.2-47.6]	1988
Male	32.3%	[25.3-40.2]	1951
Race			
White	37.5%	[25.2-51.8]	1509
Black	35.1%	[26.5-44.8]	837
Hispanic	33.6%	[28.2-39.5]	1006
Other	30.3%	[21.4-40.8]	421
Grade			
6th	34.6%	[20.1-52.7]	1030
7th	38.3%	[29.5-48.0]	1545
8th	33.3%	[21.9-47.0]	1388
Region			
Rest of State	39.3%	[25.5-55.1]	2032
New York City	28.9%	[21.2-38.0]	1931
High School			
Gender*			
Female	45.2%	[38.5-52.1]	2281
Male	36.0%	[31.1-41.3]	1980
Race			
White	46.2%	[38.4-54.2]	1991
Black	33.9%	[20.8-50.2]	715
Hispanic	31.1%	[24.9-38.0]	893
Other	41.9%	[32.4-52.1]	568
Grade			
9th	41.3%	[32.6-50.7]	1314
10th	39.3%	[32.1-46.9]	1109
11th	45.0%	[36.9-53.3]	923
12th	38.7%	[29.3-49.0]	955
Decier			
Region	A		0500
Rest of State	46.6%	[38.5-54.8]	2528
New York City	30.7%	[20.9-42.6]	1773

DT. 4-52b Percentage of Middle and High School Students' Who
are Against the Clean Indoor Air Act by Demographic
Characteristics, YTS 2004

Category	Estimate	C.I.	Ν
Middle School			
Gender			
Female	12.2%	[9.7-15.2]	1387
Male	13.7%	[10.4-17.9]	1259
Race*			
White	9.5%	[6.2-14.2]	954
Black	14.6%	[11.0-19.1]	652
Hispanic	16.7%	[12.5-22.0]	730
Other	18.0%	[12.2-25.6]	225
Grade			
6th	16.4%	[11.2-23.5]	659
7th	13.3%	[8.9-19.5]	1106
8th	9.0%	[6.2-13.0]	899
Region*			
Rest of State	9.8%	[7.0-13.6]	1430
New York City	18.8%	[14.7-23.6]	1234
High School			
Gender*			
Female	11.3%	[8.7-14.5]	1823
Male	18.3%	[14.0-23.6]	1490
Race*			
White	16.1%	[13.0-19.7]	1626
Black	8.9%	[5.6-13.8]	500
Hispanic	12.6%	[9.0-17.2]	663
Other	10.5%	[6.7-16.0]	456
Grade*			
9th	9.9%	[7.3-13.3]	959
10th	14.2%	[11.8-16.9]	883
11th	16.3%	[11.7-22.2]	771
12th	19.0%	[13.6-25.9]	730
Region			
Rest of State	14.7%	[12.4-17.2]	2082
New York City	13.7%	[6.5-26.4]	1261

Category	Estimate	C.I.	Ν
Middle School			
Gender*			
Female	27.9%	[25.2-30.8]	1387
Male	31.7%	[27.7-36.1]	1259
Race			
White	27.3%	[21.7-33.6]	954
Black	35.5%	[31.4-39.8]	652
Hispanic	33.0%	[29.8-36.5]	730
Other	27.8%	[21.6-34.9]	225
Grade			
6th	25.2%	[20.1-31.1]	659
7th	30.1%	[25.1-35.6]	1106
8th	33.8%	[28.7-39.3]	899
Region			
Rest of State	28.4%	[24.5-32.7]	1430
New York City	32.0%	[26.9-37.6]	1234
High School			
Gender			
Female	28.3%	[25.0-31.8]	1823
Male	30.5%	[27.2-34.0]	1490
Race*			
White	25.9%	[22.9-29.2]	1626
Black	32.8%	[28.9-37.0]	500
Hispanic	36.0%	[30.1-42.4]	663
Other	32.7%	[27.4-38.4]	456
Grade			
9th	30.2%	[25.1-35.9]	959
10th	32.5%	[28.4-36.9]	883
11th	26.6%	[22.2-31.5]	771
12th	26.3%	[22.1-31.1]	730
Region*	07.00/		0000
Rest of State	27.2%	[24.3-30.2]	2082
New York City	34.4%	[28.9-40.4]	1261

## DT. 4-52c Percentage of Middle and High School Students' Who are Indifferent Towards the Clean Indoor Air Act by Demographic Characteristics, YTS 2004

Category	Estimate	C.I.	Ν
Age*			
18-24	74.9%	[69.8-79.4]	562
25-34	74.8%	[71.2-78.1]	1249
35-44	75.1%	[72.1-77.9]	1609
45-54	72.2%	[69.0-75.1]	1633
55-64	68.2%	[64.6-71.6]	1357
65 + years	64.6%	[61.4-67.7]	1649
Race*			
	70 E9/	[40 0 72 1]	6151
White (non-Hispanic)	70.5%	[69.0-72.1]	6151
Black (non-Hispanic)	70.3%	[65.8-74.4]	807
Hispanic	77.3%	[72.8-81.3]	757
Other	72.4%	[66.7-77.5]	526
Gender			
Male	73.0%	[70.7-75.1]	3204
Female	70.5%	[68.7-72.2]	5034
Education*			
Less Than High School	70.6%	[65.4-75.3]	652
High School	65.7%	[62.8-68.5]	2214
Some College	72.5%	[69.6-75.2]	1988
College Degree or More	75.5%	[73.4-77.5]	3350
Region	70.00/		1700
Western	72.9%	[70.0-75.7]	1703
Central	72.5%	[68.5-76.1]	953
Capital	68.9%	[64.7-72.8]	953
Metro	71.6%	[69.7-73.4]	4632
Insurance*			
Public	70.4%	[67.0-73.5]	1535
Private	76.1%	[74.2-77.8]	4084
None	77.6%	[72.4-82.0]	622

# DT. 4-55 Percentage of Adults Who Believe Secondhand Smoke Causes Heart Disease by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	Ν
Age*			
18-24	58.9%	[49.9-67.4]	219
25-34	65.5%	[58.2-72.2]	337
35-44	60.5%	[53.7-66.9]	420
45-54	60.5%	[53.6-67.1]	404
55-64	37.1%	[29.1-45.9]	249
65 + years	35.4%	[26.4-45.5]	160
Race			
White (non-Hispanic)	53.7%	[49.9-57.4]	1342
Black (non-Hispanic)	60.1%	[50.8-68.8]	187
Hispanic	66.0%	[54.9-75.5]	169
Other	58.6%	[44.4-71.5]	109
Utilei	56.0%	[44.4-71.5]	111
Gender			
Male	59.1%	[54.2-63.8]	788
Female	54.1%	[49.6-58.6]	1020
Education*			
Less Than High School	63.6%	[53.9-72.3]	213
High School	49.9%	[44.2-55.6]	645
Some College	57.4%	[51.3-63.3]	519
College Degree or More	62.4%	[55.8-68.5]	429
Region			
Western	54.7%	[47.9-61.3]	418
Central	54.7%	[45.6-62.8]	251
Capital	55.9%	[46.8-64.6]	242
Metro	58.0%	[53.4-62.5]	898
	30.0%	[55.4-02.5]	070
Insurance			
Public	55.0%	[48.1-61.7]	422
Private	57.4%	[52.9-61.7]	996
None	59.1%	[51.7-66.1]	351

## DT. 4-56 Percentage of Adult Smokers Who Believe Secondhand Smoke Causes Heart Disease by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	Ν
Age*			
18-24	89.1%	[85.0-92.2]	563
25-34	87.6%	[84.7-90.0]	1252
35-44	85.9%	[83.4-88.1]	1612
45-54	83.1%	[80.4-85.5]	1634
55-64	79.5%	[76.4-82.3]	1355
65 + years	76.5%	[73.6-79.2]	1650
Dooo*			
Race*	02 49/		6150
White (non-Hispanic)	82.4%	[81.1-83.7]	6152
Black (non-Hispanic)	82.7%	[78.9-86.0]	810
Hispanic	86.6%	[82.6-89.7]	759
Other	87.9%	[83.6-91.2]	526
Gender			
Male	82.5%	[80.7-84.3]	3203
Female	84.4%	[82.9-85.7]	5041
Education*			
Less Than High School	80.2%	[75.6-84.2]	653
High School	77.9%	[75.4-80.2]	2211
Some College	83.8%	[81.4-85.9]	1987
College Degree or More	87.9%	[86.2-89.3]	3358
Destau			
Region	00.10/	[00 ( 05 0]	1704
Western	83.1%	[80.6-85.3]	1704
Central	83.3%	[80.0-86.1]	954
Capital	80.8%	[77.2-84.0]	955
Metro	83.9%	[82.4-85.3]	4634
Insurance*			
Public	83.5%	[80.8-85.9]	1538
Private	89.1%	[87.7-90.4]	4088
None	86.8%	[82.4-90.2]	625

# DT. 4-57 Percentage of Adults Who Believe Secondhand Smoke Causes Lung Cancer by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	Ν
Age*			
18-24	79.2%	[70.4-85.9]	219
25-34	73.6%	[66.4-79.8]	338
35-44	67.2%	[60.5-73.4]	420
45-54	61.8%	[54.9-68.3]	405
55-64	46.1%	[37.3-55.1]	248
65 + years	36.7%	[27.3-47.3]	158
Race	(2.20)		1041
White (non-Hispanic)	63.3%	[59.7-66.9]	1341
Black (non-Hispanic)	64.7%	[55.3-73.0]	187
Hispanic	71.4%	[60.1-80.5]	169
Other	77.3%	[65.6-85.8]	111
Gender			
Male	66.5%	[61.8-70.9]	787
Female	64.5%	[60.1-68.6]	1020
<b>5</b> 1 1 1			
Education*			
Less Than High School	70.4%	[61.2-78.2]	213
High School	59.9%	[54.3-65.3]	644
Some College	66.1%	[60.2-71.6]	519
College Degree or More	70.6%	[64.5-76.1]	429
Region			
Western	65.7%	[59.1-71.7]	418
Central	59.5%	[50.7-67.7]	251
Capital	60.7%	[51.6-69.1]	241
Metro	67.5%	[63.1-71.7]	898
	<del>_</del>		
Insurance			
Public	64.4%	[57.9-70.5]	420
Private	66.1%	[61.8-70.1]	997
None	67.7%	[60.6-74.1]	351

## DT. 4-58 Percentage of Adult Smokers Who Believe Secondhand Smoke Causes Lung Cancer by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	Ν
Age*			
18-24	42.1%	[36.5-48.0]	563
25-34	40.1%	[36.3-44.0]	1246
35-44	35.3%	[32.0-38.8]	1606
45-54	29.0%	[25.8-32.3]	1631
55-64	26.7%	[23.3-30.3]	1354
65 + years	24.7%	[21.7-27.8]	1641
Race*			
White (non-Hispanic)	28.8%	[27.3-30.5]	6131
Black (non-Hispanic)	37.2%	[32.5-42.2]	806
Hispanic	41.5%	[36.6-46.6]	759
Other	42.5%	[36.3-49.0]	525
Gender			
Male	33.3%	[30.9-35.8]	3191
Female	32.7%	[30.8-34.6]	5027
Education			
Less Than High School	39.5%	[33.8-45.4]	652
High School	31.0%	[28.1-34.0]	2207
Some College	32.3%	[29.2-35.6]	1986
College Degree or More	33.1%	[30.8-35.4]	3338
Region			
Western	33.0%	[29.9-36.2]	1700
Central	29.6%	[25.9-33.7]	953
Capital	29.2%	[25.2-33.5]	949
Metro	33.8%	[31.8-35.9]	4619
Insurance*			
Public	32.0%	[28.4-35.7]	1529
Private	33.1%	[31.0-35.2]	4070
None	45.4%	[39.6-51.4]	623

# DT. 4-58a Percentage of Adults Who Believe Secondhand Smoke Causes Colon Cancer by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	Ν
Age*			
18-24	34.6%	[26.8-43.3]	219
25-34	31.1%	[24.6-38.3]	335
35-44	24.7%	[19.1-31.4]	420
45-54	21.2%	[14.9-29.2]	405
55-64	17.7%	[11.6-26.1]	249
65 + years	8.3%	[5.1-13.3]	160
Race			
White (non-Hispanic)	22.9%	[19.8-26.4]	1341
Black (non-Hispanic)	27.7%	[19.6-37.4]	187
Hispanic	34.3%	[24.7-45.3]	169
Other	26.5%	[16.1-40.2]	111
Gender*			
Male	28.7%	[24.2-33.7]	786
Female	22.0%	[18.5-26.0]	1021
Education			
Less Than High School	32.6%	[23.5-43.2]	213
High School	21.1%	[16.6-26.5]	645
Some College	24.6%	[19.7-30.1]	519
College Degree or More	29.0%	[23.1-35.7]	428
Region			
Western	26.5%	[20.8-33.1]	418
Central	15.9%	[10.9-22.7]	252
Capital	26.0%	[18.8-34.7]	242
Metro	27.1%	[22.9-31.7]	896
Insurance			
Public	24.4%	[19.1-30.7]	422
Private	24.8%	[21.0-29.0]	996
None	28.1%	[21.3-36.1]	350

## DT. 4-58b Percentage of Adult Smokers Who Believe Secondhand Smoke Causes Colon Cancer by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	N
Age*			
18-24	95.0%	[92.0-96.9]	563
25-34	93.9%	[91.5-95.7]	1254
35-44	95.4%	[93.7-96.6]	1613
45-54	93.4%	[91.6-94.8]	1635
55-64	89.9%	[87.3-91.9]	1358
65 + years	85.8%	[83.5-87.8]	1648
Race			
White (non-Hispanic)	91.7%	[90.7-92.6]	6156
Black (non-Hispanic)	91.6%	[88.6-93.8]	810
Hispanic	94.5%	[91.9-96.4]	760
Other	93.6%	[90.7-95.7]	527
Gender*			
Male	90.3%	[88.9-91.6]	3203
Female	94.0%	[93.1-94.7]	5047
Education*			
Less Than High School	88.5%	[84.6-91.5]	655
High School	90.8%	[89.1-92.2]	2215
Some College	92.6%	[90.9-94.0]	1989
College Degree or More	94.0%	[92.7-95.0]	3356
Region			
Western	92.0%	[90.2-93.4]	1705
Central	94.2%	[92.1-95.8]	953
Capital	93.0%	[90.9-94.6]	955
Metro	92.0%	[90.8-93.0]	4640
Insurance*			
Public	89.8%	[87.4-91.8]	1537
Private	95.4%	[94.5-96.2]	4091
None	94.9%	[92.3-96.7]	626

## DT. 4-58c Percentage of Adults Who Believe Secondhand Smoke Causes Respiratory Problems in Children by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	Ν
Age*			
18-24	93.9%	[89.1-96.6]	219
25-34	88.3%	[81.6-92.8]	338
35-44	90.3%	[86.3-93.3]	420
45-54	82.4%	[76.5-87.0]	405
55-64	67.1%	[58.1-75.0]	247
65 + years	62.5%	[51.8-72.1]	158
Race			
White (non-Hispanic)	84.6%	[81.8-86.9]	1339
Black (non-Hispanic)	84.7%	[77.5-89.9]	187
Hispanic	85.7%	[76.1-91.9]	170
Other	83.6%	[72.1-91.0]	111
Gender			
Male	83.7%	[80.1-86.8]	784
Female	85.7%	[82.5-88.5]	1022
Education			
Less Than High School	87.6%	[81.7-91.8]	214
High School	83.5%	[79.3-87.1]	644
Some College	82.4%	[77.0-86.7]	519
College Degree or More	87.5%	[82.7-91.1]	427
Region	05.00/		110
Western	85.2%	[80.6-88.8]	418
Central	90.3%	[83.9-94.4]	250
Capital	87.0%	[81.4-91.1]	241
Metro	83.0%	[79.4-86.1]	898
Insurance			
Public	83.1%	[78.0-87.2]	420
Private	84.4%	[81.2-87.3]	997
None	88.8%	[84.0-92.3]	350
	00.070	[04.0-72.3]	300

## DT. 4-58d Percentage of Adult Smokers Who Believe Secondhand Smoke Causes Respiratory Problems in Children by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	Ν
Age*			
18-24	58.7%	[52.9-64.3]	561
25-34	48.7%	[44.8-52.7]	1248
35-44	43.7%	[40.3-47.2]	1601
45-54	32.8%	[29.5-36.3]	1630
55-64	26.7%	[23.3-30.3]	1347
65 + years	27.9%	[24.9-31.2]	1639
Race*			
White (non-Hispanic)	33.2%	[31.5-34.8]	6120
Black (non-Hispanic)	45.6%	[40.7-50.5]	807
Hispanic	57.0%	[52.0-61.9]	756
Other	46.5%	[40.3-52.9]	524
Gender*			
Male	37.2%	[34.7-39.8]	3185
Female	41.5%	[39.5-43.5]	5019
Education*			
Less Than High School	54.4%	[48.6-60.0]	651
High School	38.6%	[35.6-41.7]	2205
Some College	39.7%	[36.5-43.0]	1985
College Degree or More	36.4%	[34.0-38.8]	3329
Region*			
Western	35.3%	[32.2-38.5]	1696
Central	40.6%	[36.3-45.0]	951
Capital	33.5%	[29.4-38.0]	950
Metro	40.9%	[38.9-43.0]	4610
Insurance*			
Public	39.7%	[36.0-43.6]	1523
Private	38.2%	[36.1-40.4]	4070
None	56.1%	[50.3-61.8]	624

# DT. 4-58e Percentage of Adults Who Believe Secondhand Smoke Causes SIDS by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	Ν
Age*			
18-24	50.9%	[42.1-59.6]	218
25-34	36.1%	[29.5-43.4]	334
35-44	29.3%	[23.3-36.1]	417
45-54	23.1%	[16.8-30.9]	403
55-64	21.6%	[14.9-30.2]	247
65 + years	16.5%	[9.8-26.4]	160
Race*			
White (non-Hispanic)	27.6%	[24.4-31.1]	1333
Black (non-Hispanic)	40.7%	[31.5-50.7]	187
Hispanic	40.7%	[33.9-55.3]	168
Other	30.7%	[19.5-44.8]	108
Other	30.776	[19.3-44.0]	
Gender			
Male	32.5%	[27.9-37.4]	781
Female	32.1%	[28.0-36.5]	1017
Education*	11.00/	[040540]	010
Less Than High School	44.0%	[34.3-54.2]	213
High School	30.0%	[24.9-35.6]	644
Some College	29.5%	[24.3-35.3]	517
College Degree or More	31.2%	[25.4-37.7]	422
Region			
Western	29.1%	[23.2-35.8]	417
Central	32.5%	[24.6-41.4]	250
Capital	30.3%	[22.8-38.9]	242
Metro	33.5%	[29.2-38.2]	890
Insurance			
Public	35.3%	[28.9-42.2]	421
Private	28.7%	[24.9-32.9]	988
None	37.9%	[30.6-45.7]	350

# DT. 4-58f Percentage of Adult Smokers Who Believe Secondhand Smoke Causes SIDS by Demographic Characteristics, ATS 2004

DT. 4-62 Percentage of Middle and High School Students Who
Think Secondhand Smoke is Harmful by Demographic
Characteristics, YTS 2004

Category	Estimate	C.I.	Ν
Middle School			
Gender			
Female	93.1%	[91.0-94.7]	1923
Male	91.1%	[88.6-93.1]	1798
Race*			
White	94.5%	[93.0-95.8]	1492
Black	90.3%	[85.0-93.8]	743
Hispanic	88.6%	[83.4-92.3]	936
Other	90.3%	[84.8-94.0]	399
Grade			
6th	91.5%	[88.8-93.6]	949
7th	91.6%	[88.8-93.7]	1450
8th	93.3%	[90.8-95.1]	1343
Region*			
Rest of State	93.9%	[92.7-95.0]	1993
New York City	88.6%	[83.9-92.1]	1749
High School			
Gender*			
Female	95.3%	[93.4-96.7]	2249
Male	90.5%	[88.2-92.4]	1886
Race*			
White	94.7%	[92.7-96.2]	1976
Black	92.1%	[88.1-94.8]	664
Hispanic	90.6%	[86.1-93.8]	853
Other	90.8%	[86.9-93.7]	554
Grade			
9th	92.0%	[89.2-94.1]	1290
10th	92.4%	[89.8-94.3]	1078
11th	93.9%	[90.6-96.1]	897
12th	95.2%	[92.8-96.8]	906
Region*			
Rest of State	94.5%	[93.1-95.7]	2500
New York City	90.4%	[87.3-92.8]	1671

Category	Estimate	C.I.	Ν
Age			
18-24	68.2%	[62.7-73.2]	563
25-34	73.4%	[69.7-76.7]	1253
35-44	73.7%	[70.5-76.7]	1611
45-54	68.4%	[64.9-71.6]	1633
55-64	70.1%	[66.4-73.6]	1359
65 + years	69.9%	[66.8-72.8]	1646
Race			
White (non-Hispanic)	70.0%	[68.4-71.6]	6150
Black (non-Hispanic)	68.9%	[64.3-73.1]	811
Hispanic	74.9%	[69.9-79.3]	760
Other	75.5%	[70.1-80.2]	525
Gender*			
Male	67.4%	[64.9-69.7]	3205
Female	74.2%	[72.5-75.8]	5038
Education*			
Less Than High School	63.9%	[58.1-69.4]	655
High School	66.8%	[63.9-69.7]	2213
Some College	69.7%	[66.6-72.6]	1983
College Degree or More	76.2%	[74.1-78.2]	3358
Region			
Western	68.0%	[64.9-71.0]	1702
Central	69.3%	[65.2-73.1]	955
Capital	69.1%	[64.9-73.0]	954
Metro	72.1%	[70.2-73.9]	4635
Insurance*			
Public	68.6%	[65.6-71.4]	1961
Private	73.7%	[71.9-75.4]	5101
None	64.0%	[59.3-68.5]	982

# DT. 4-63 Percentage of Adults in Smoke-free Homes by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	Ν
Age*			
18-24	80.3%	[73.8-85.5]	344
25-34	82.7%	[78.8-86.0]	911
35-44	85.6%	[82.3-88.4]	1185
45-54	79.3%	[75.7-82.5]	1224
55-64	79.6%	[75.7-83.0]	1106
65 + years	74.3%	[71.1-77.2]	1476
Race			
White (non-Hispanic)	79.4%	[77.8-81.0]	4785
Black (non-Hispanic)	79.8%	[74.8-84.0]	615
Hispanic	83.4%	[77.9-87.7]	590
Other	84.4%	[79.2-88.4]	413
Gender*			
Male	76.7%	[74.0-79.1]	2404
Female	83.7%	[82.1-85.2]	3997
Education			
Less Than High School	79.5%	[72.6-85.1]	437
High School	79.7%	[76.6-82.5]	1560
Some College	80.5%	[77.2-83.4]	1460
College Degree or More	81.0%	[78.9-82.9]	2914
Desien			
Region	00 ( 0(		1000
Western	80.6%	[77.4-83.4]	1280
Central	82.9%	[78.9-86.2]	699
Capital	83.0%	[79.0-86.4]	711
Metro	79.8%	[77.9-81.7]	3713
Insurance			
Public	78.8%	[75.9-81.5]	1532
Private	81.3%	[79.4-82.9]	4087
None	79.1%	[73.3-84.0]	625

# DT. 4-64 Percentage of Adult Nonsmokers in Smoke-free Homes by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	N
Age*			
18-24	39.4%	[31.3-48.1]	219
25-34	37.9%	[31.2-45.0]	338
35-44	28.0%	[22.6-34.1]	421
45-54	20.2%	[15.7-25.7]	406
55-64	11.8%	[7.9-17.3]	247
65 + years	11.1%	[6.3-18.7]	161
Race			
White (non-Hispanic)	27.9%	[24.8-31.4]	1342
Black (non-Hispanic)	22.1%	[15.0-31.3]	189
Hispanic	35.7%	[26.6-46.0]	170
Other	24.9%	[15.7-37.2]	111
Gender			
Male	30.1%	[26.0-34.5]	787
Female	25.7%	[21.9-29.9]	1024
Education			
Less Than High School	24.8%	[17.7-33.5]	215
High School	27.6%	[22.9-32.8]	647
Some College	25.4%	[20.6-30.9]	518
College Degree or More	34.1%	[28.2-40.5]	429
Region			
Western	23.3%	[18.4-29.1]	417
Central	25.8%	[18.9-34.0]	252
Capital	24.2%	[17.5-32.4]	242
Metro	30.5%	[26.6-34.9]	901
Insurance			
Public	23.6%	[18.0-30.3]	421
Private	31.0%	[27.1-35.2]	999
None	25.3%	[19.9-31.6]	352

# DT. 4-65 Percentage of Adult Smokers in Smoke-free Homes by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	Ν
Age*			
18-24	67.8%	[62.0-73.1]	487
25-34	74.9%	[71.2-78.1]	1065
35-44	78.5%	[75.6-81.2]	1457
45-54	77.3%	[74.1-80.1]	1451
55-64	79.7%	[76.5-82.6]	1205
65 + years	84.4%	[81.9-86.6]	1391
Race*			
White (non-Hispanic)	74.9%	[73.3-76.4]	5580
Black (non-Hispanic)	84.2%	[79.5-88.0]	611
Hispanic	83.8%	[79.1-87.7]	569
Other	81.3%	[76.3-85.5]	452
Gender*			
Male	74.4%	[72.1-76.6]	2844
Female	80.7%	[79.1-82.2]	4365
Education*			
Less Than High School	73.7%	[67.6-79.0]	458
High School	72.0%	[69.2-74.7]	1952
Some College	74.4%	[71.3-77.3]	1783
College Degree or More	83.9%	[82.1-85.6]	2991
~~~~			
Region*			
Western	71.7%	[68.6-74.6]	1607
Central	71.1%	[67.0-74.9]	897
Capital	68.7%	[64.3-72.7]	895
Metro	81.4%	[79.6-83.0]	3813
Insurance*			
Public	78.7%	[75.7-81.5]	1589
Private	78.9%	[77.2-80.4]	4663
None	70.2%	[65.6-74.4]	795

## DT. 4-66 Percentage of Adults in Smoke-free Cars by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	N
Age			
18-24	84.2%	[77.4-89.3]	299
25-34	85.1%	[81.4-88.2]	779
35-44	90.6%	[87.8-92.7]	1076
45-54	88.0%	[84.8-90.6]	1101
55-64	87.8%	[84.9-90.2]	994
65 + years	88.2%	[85.9-90.2]	1262
Race			
White (non-Hispanic)	86.5%	[85.1-87.9]	4364
Black (non-Hispanic)	90.0%	[84.9-93.6]	485
Hispanic	90.8%	[85.8-94.1]	444
Other	90.6%	[86.5-93.5]	353
Gender*			
Male	84.6%	[82.3-86.7]	2163
Female	90.7%	[89.3-91.9]	3481
Education			
Less Than High School	89.0%	[82.9-93.1]	297
High School	87.2%	[84.7-89.3]	1389
Some College	86.3%	[82.9-89.2]	1328
College Degree or More	88.8%	[87.1-90.4]	2608
Region			
Western	87.0%	[84.3-89.3]	1215
Central	85.9%	[82.1-89.0]	661
Capital	84.3%	[80.4-87.6]	676
Metro	88.7%	[87.0-90.2]	3094
Insurance			
Public	88.8%	[85.8-91.3]	1260
Private	87.8%	[86.2-89.1]	3754
None	85.8%	[80.8-89.7]	502

# DT. 4-67 Percentage of Adult Nonsmokers in Smoke-free Cars by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	Ν
Age			
18-24	28.1%	[20.5-37.3]	188
25-34	33.8%	[26.1-42.4]	282
35-44	30.5%	[24.3-37.4]	376
45-54	24.2%	[18.7-30.7]	348
55-64	25.7%	[18.0-35.3]	206
65 + years	24.3%	[16.1-35.0]	122
Race*			
White (non-Hispanic)	20.6%	[17.6-23.9]	1195
Black (non-Hispanic)	52.6%	[40.8-64.1]	121
Hispanic	51.5%	[39.3-63.5]	125
Other	24.1%	[14.2-37.9]	98
Gender			
Male	30.4%	[25.7-35.6]	669
Female	26.5%	[22.5-30.9]	869
Education*			
Less Than High School	36.5%	[26.3-48.1]	159
High School	24.2%	[19.6-29.5]	558
Some College	23.9%	[18.4-30.4]	451
College Degree or More	37.1%	[30.2-44.4]	369
Designet			
Region*	14.004	[10 1 01 4]	200
Western	16.2%	[12.1-21.4]	388
Central	22.8%	[15.9-31.7]	233
Capital	15.5%	[10.1-22.8]	218
Metro	37.5%	[32.5-42.7]	700
Insurance			
Public	31.0%	[24.3-38.7]	324
Private	26.1%	[22.2-30.4]	894
None	30.6%	[23.6-38.7]	288

# DT. 4-68 Percentage of Adult Smokers in Smoke-free Cars by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	Ν
Age*			
18-24	50.5%	[44.7-56.2]	557
25-34	48.2%	[44.2-52.2]	1228
35-44	49.7%	[46.2-53.1]	1586
45-54	47.5%	[44.0-51.1]	1603
55-64	39.8%	[36.1-43.7]	1317
65 + years	35.4%	[32.2-38.8]	1566
Race*			
White (non-Hispanic)	49.4%	[47.6-51.2]	5991
Black (non-Hispanic)	37.9%	[33.1-42.9]	790
Hispanic	38.5%	[33.7-43.5]	742
Other	38.5%	[32.4-44.9]	500
Other	30.370	[32.4-44.7]	500
Gender*			
Male	47.5%	[45.0-50.0]	3141
Female	43.3%	[41.3-45.3]	4879
Education*			
Less Than High School	31.3%	[26.0-37.1]	627
High School	41.6%	[38.5-44.7]	2134
Some College	44.5%	[41.2-47.8]	1942
College Degree or More	51.8%	[49.3-54.2]	3285
Region*	47.40/		1///
Western	47.4%	[44.1-50.7]	1666
Central	47.9%	[43.5-52.3]	918
Capital	53.8%	[49.4-58.2]	921
Metro	43.5%	[41.5-45.6]	4518
Insurance*			
Public	38.1%	[34.9-41.5]	1878
Private	49.6%	[47.6-51.5]	5000
None	41.6%	[37.0-46.3]	958

### DT. 4-70 Percentage of Adults Who Believe Tobacco-Related News Stories are Negatively Slanted in the Media by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	Ν
Age*			
18-24	23.0%	[18.6-28.1]	555
25-34	18.9%	[15.7-22.5]	1230
35-44	16.4%	[14.0-19.2]	1587
45-54	14.4%	[11.8-17.3]	1603
55-64	12.0%	[9.5-14.9]	1339
65 + years	7.8%	[6.2-9.9]	1622
Race*			
	12 /0/	[12 2 14 7]	6066
White (non-Hispanic)	13.4%	[12.2-14.7]	6066
Black (non-Hispanic) Hispanic	<u>16.8%</u> 19.3%	[13.3-21.1] [15.4-23.8]	797 740
Other			
Other	19.0%	[14.6-24.5]	508
Gender*			
Male	21.1%	[19.0-23.3]	3147
Female	9.8%	[8.7-11.1]	4961
Education			
Less Than High School	11.7%	[8.3-16.1]	649
High School	14.9%	[12.7-17.5]	2177
Some College	16.6%	[14.2-19.4]	1951
College Degree or More	15.4%	[13.6-17.4]	3297
Region			
Western	14.9%	[12.6-17.6]	1680
Central	14.9%	[11.6-18.9]	944
Capital	12.0%	[9.3-15.4]	945
Metro	15.6%	[14.1-17.3]	4542
Insurance			
Public	13.2%	[10.8-16.0]	1929
Private	15.4%	[13.9-17.0]	5017
None	17.0%	[13.7-21.0]	965

# DT. 4-74 Percentage of Adults Who Noticed Tobacco Advertising at Sporting Events by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	N
Age*			
18-24	12.9%	[9.5-17.3]	548
25-34	10.6%	[8.2-13.5]	1221
35-44	11.6%	[9.4-14.1]	1592
45-54	7.8%	[6.1-10.0]	1607
55-64	6.2%	[4.6-8.3]	1341
65 + years	5.3%	[3.9-7.2]	1622
Race*			
White (non-Hispanic)	7.7%	[6.8-8.7]	6066
Black (non-Hispanic)	13.7%	[10.3-18.0]	794
Hispanic	10.8%	[8.0-14.4]	733
Other	8.4%	[5.8-12.0]	511
Gender*			
Male	10.7%	[9.1-12.5]	3140
Female	7.6%	[6.6-8.8]	4962
Temale	7.078	[0.0-0.0]	4702
Education			
Less Than High School	9.5%	[6.7-13.5]	639
High School	8.4%	[6.7-10.4]	2165
Some College	8.8%	[6.9-11.2]	1950
College Degree or More	9.6%	[8.2-11.2]	3314
Region*			
Western	8.1%	[6.4-10.3]	1683
Central	5.5%	[3.8-8.1]	946
Capital	6.1%	[3.9-9.3]	948
Metro	10.1%	[8.8-11.5]	4537
	10.170	[0.0-11.3]	4007
Insurance			
Public	8.8%	[6.7-11.3]	1922
Private	8.8%	[7.7-10.0]	5024
None	10.5%	[8.0-13.8]	961

# DT. 4-75 Percentage of Adults Who Noticed Tobacco Advertising at Cultural Events by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	Ν
Region			
Capital	66.7%	[62.4-70.9]	471
Central	86.0%	[82.8-89.1]	470
Metro	79.0%	[76.3-81.8]	839
Western	92.2%	[89.8-94.6]	486
New York State	80.7%	[79.1-82.3]	2266

#### DT. 4-76a Percentage of New York Tobacco Retailers with Price Promotions, By Region, November 2004

#### DT. 4-76b Percentage of New York Tobacco Retailers with Volume Discounts, By Region, November 2004

Category	Estimate	C.I.	Ν
Region			
Capital	13.6%	[10.5-16.7]	471
Central	11.5%	[8.6-14.4]	470
Metro	11.7%	[9.5-13.9]	839
Western	13.2%	[10.2-16.2]	486
New York State	12.4%	[11.0-13.7]	2266

#### DT. 4-76c Percentage of New York Tobacco Retailers with Purchase Promotions, By Region, November 2004

Category	Estimate	C.I.	Ν
Region			
Capital	26.8%	[22.7-30.8]	471
Central	15.5%	[12.2-18.8]	470
Metro	14.3%	[11.9-16.7]	839
Western	14.6%	[11.5-17.8]	486
New York State	17.2%	[15.7-18.8]	2266

Category	Estimate	C.I.	Ν
Region			
Capital	47.8%	[43.2-52.3]	471
Central	56.2%	[51.7-60.7]	470
Metro	54.7%	[51.3-58.1]	839
Western	52.9%	[48.4-57.3]	486
New York State	53.2%	[51.1-55.2]	2266

## DT. 4-77a Percentage of Tobacco Retailers with Any Exterior Cigarette Advertising, By Region, November 2004

#### DT. 4-77b Percentage of Tobacco Retailers with Any Interior Cigarette Advertising, By Region, November 2004

Category	Estimate	C.I.	Ν
Region			
Capital	97.5%	[96.0-98.9]	471
Central	97.0%	[95.5-98.6]	470
Metro	90.7%	[88.7-92.7]	839
Western	95.3%	[93.4-97.2]	486
New York State	94.4%	[93.4-95.3]	2266

#### DT. 4-77c Percentage of Tobacco Retailers with Any Branded Functional Items, By Region, November 2004

Category	Estimate	C.I.	Ν
Region			
Capital	3.2%	[1.6-4.8]	471
Central	1.1%	[0.1-2.0]	470
Metro	4.1%	[2.7-5.4]	839
Western	2.7%	[1.2-4.1]	486
New York State	3.0%	[2.3-3.7]	2266

# DT. 4-78a Average Number of Exterior Advertisements (Outlets with > 0 Ads), By Region, November 2004

Category	Estimate	C.I.	Ν
Region			
Capital	3.5	[3.1-3.9]	225
Central	4.2	[3.7-4.6]	264
Metro	5.2	[4.8-5.5]	459
Western	4.5	[4.1-5.0]	257
New York State	4.5	[4.3-4.7]	1205

# DT. 4-78b Average Number of Exterior Advertisements (All Outlets), By Region, November 2004

Category	Estimate	C.I.	Ν
Region			
Capital	1.7	[1.4-1.9]	471
Central	2.4	[2.0-2.7]	470
Metro	2.8	[2.6-3.1]	839
Western	2.4	[2.1-2.7]	486
New York State	2.4	[2.2-2.5]	2266

#### DT. 4-78c Average Number of Interior Advertisements, By Region, November 2004

Category	Estimate	C.I.	Ν
Region			
Capital	19.5	[18.3-20.7]	471
Central	17.4	[16.3-18.6]	470
Metro	13.2	[12.6-13.8]	839
Western	13.9	[13.2-14.6]	486
New York State	15.5	[15.1-16.0]	2266

Category	Estimate	C.I.	N
Middle School	LStillate	0.1.	IN
Gender*			
Female	89.6%	[87.5-91.4]	1839
Male	83.9%	[79.3-87.7]	1708
- Maro		[///0/0///]	1700
Race*			
White	91.0%	[89.1-92.7]	1445
Black	82.1%	[78.5-85.2]	695
Hispanic	79.4%	[71.5-85.5]	881
Other	83.7%	[74.3-90.1]	386
Grade*			
6th	83.9%	[79.0-87.8]	899
7th	85.9%	[81.8-89.2]	1377
8th	90.5%	[87.2-93.0]	1291
Region*			
Rest of State	90.7%	[88.9-92.2]	1919
New York City	79.2%	[72.6-84.6]	1648
High School			
Gender*			
Female	93.4%	[92.0-94.6]	2227
Male	85.5%	[82.2-88.3]	1844
Race*			
White	92.6%	[90.7-94.0]	1964
Black	85.1%	[81.1-88.3]	643
Hispanic	84.4%	[80.2-87.9]	844
Other	85.0%	[80.3-88.7]	538
Grade			
9th	88.8%	[85.2-91.6]	1272
10th	89.6%	[86.1-92.3]	1061
11th	90.7%	[87.1-93.4]	872
12th	90.5%	[87.6-92.7]	903
Region*	04.704		0.475
Rest of State	91.5%	[89.4-93.1]	2478
New York City	86.4%	[83.0-89.2]	1630

## DT. 4-79 Percentage of Middle and High School Students Who Saw Tobacco Advertising in Grocery Stores or Gas Stations by Demographic Characteristics, YTS 2004

Category	Estimate	C.I.	Ν
Age*			
18-24	1.6	[1.4-1.8]	563
25-34	1.5	[1.3-1.6]	1254
35-44	1.1	[1-1.2]	1614
45-54	0.9	[0.8-0.9]	1638
55-64	0.7	[0.6-0.8]	1362
65 + years	0.5	[0.5-0.6]	1655
Race*			
White (non-Hispanic)	0.9	[0.8-0.9]	6168
Black (non-Hispanic)	1.4	[1.2-1.6]	813
Hispanic	1.3	[1.2-1.5]	760
Other	1.2	[1-1.4]	527
Gender*			
Male	1.2	[1.1-1.3]	3212
Female	0.9	[0.8-0.9]	5053
Education*			
Less Than High School	1.0	[0.9-1.2]	657
High School	1.1	[1-1.2]	2218
Some College	1.1	[1-1.3]	1990
College Degree or More	0.9	[0.9-1]	3365
Region*			
Western	0.9	[0.8-1]	1706
Central	0.8	[0.7-0.9]	956
Capital	0.8	[0.7-0.9]	958
Metro	1.1	[1.1-1.2]	4648
Insurance*			
Public	0.9	[0.8-1]	1970
Private	1.0	[0.9-1]	5112
None	1.4	[1.2-1.6]	983

#### DT. 4-80 Average Index of Awareness of Tobacco Advertising or Promotions Among Adults by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	Ν
Age*			
18-24	28.1%	[23.0-33.7]	554
25-34	24.2%	[20.8-28.0]	1231
35-44	18.3%	[15.7-21.1]	1586
45-54	14.2%	[11.8-16.9]	1594
55-64	11.8%	[9.5-14.6]	1333
65 + years	9.4%	[7.5-11.8]	1602
Race*			
White (non-Hispanic)	13.2%	[11.9-14.5]	6035
Black (non-Hispanic)	25.3%	[21.3-29.8]	789
Hispanic	27.5%	[23.2-32.3]	735
Other	20.4%	[15.5-26.4]	513
Gender*			
Male	21.4%	[19.3-23.6]	3150
Female	14.1%	[12.7-15.7]	4919
Education			
Less Than High School	20.3%	[16.0-25.5]	632
High School	17.8%	[15.4-20.5]	2162
Some College	19.1%	[16.4-22.0]	1947
College Degree or More	15.9%	[14.1-17.9]	3295
Region*			
Western	13.2%	[11.1-15.8]	1669
Central	12.6%	[9.6-16.4]	939
Capital	11.8%	[8.8-15.5]	936
Metro	19.8%	[18.1-21.6]	4528
Insurance*	16.1%	[13.7-18.8]	1917
Public	16.0%	[14.5-17.6]	4998
Private	27.2%	[23.0-31.8]	963
None	16.1%	[13.7-18.8]	1917

## DT. 4-80a Percentage of Adults Who Noticed Tobacco Advertising or Promotions At Least Once a Day on Posters or Billboards by Demographic Characteristics, ATS 2004.

### DT. 4-80b Percentage of Adults Who Noticed Tobacco Advertising Or Promotions At Least Once A Day In Newspapers Or Magazines by Demographic Characteristics, ATS 2004.

Category	Estimate	C.I.	Ν
Age*			
18-24	21.9%	[17.4-27.2]	556
25-34	21.8%	[18.6-25.4]	1232
35-44	17.4%	[14.9-20.2]	1577
45-54	15.9%	[13.2-19.0]	1599
55-64	12.6%	[10.2-15.4]	1322
65 + years	13.4%	[11.2-16.1]	1602
Race*			
White (non-Hispanic)	14.3%	[13.1-15.5]	6029
Black (non-Hispanic)	24.3%	[20.1-29.0]	781
Hispanic	21.9%	[17.8-26.6]	733
Other	19.8%	[15.0-25.6]	514
Condert			
Gender*	10 60/	[17 6 01 0]	2122
Male Female	19.6%	[17.6-21.8]	3132 4922
remaie	15.1%	[13.7-16.7]	4922
Education*	16.5%	[12.3-21.8]	637
Less Than High School	17.5%	[15.2-20.0]	2158
High School	21.0%	[18.1-24.2]	1944
Some College	14.9%	[13.2-16.7]	3281
College Degree or More	16.5%	[12.3-21.8]	637
Region*			
Western	16.5%	[14.2-19.2]	1674
Central	11.2%	[8.6-14.4]	938
Capital	16.1%	[13.0-19.9]	934
Metro	18.3%	[16.7-20.1]	4511
Incurance			
Insurance	10.00/	[14 0 00 1]	1000
Public	18.9%	[16.2-22.1]	1908
Private	16.2%	[14.7-17.7]	4990
None	19.6%	[16.0-23.8]	965

#### DT. 4-80c Percentage of Adults Who Noticed Tobacco Advertising Or Promotions At Least Once A Day In Shop Windows Or Inside Shops Where Tobacco Is Sold by Demographic Characteristics, ATS 2004.

Category	Estimate	C.I.	Ν
Age*			
18-24	39.1%	[33.6-44.8]	557
25-34	35.6%	[31.8-39.5]	1218
35-44	31.3%	[28.1-34.6]	1583
45-54	25.5%	[22.5-28.8]	1587
55-64	18.9%	[15.9-22.4]	1327
65 + years	10.9%	[8.9-13.2]	1598
Race*			
White (non-Hispanic)	24.2%	[22.7-25.8]	6018
Black (non-Hispanic)	31.3%	[26.9-36.2]	785
Hispanic	32.4%	[27.8-37.3]	728
Other	32.8%	[26.9-39.3]	506
Gender*			
Male	32.5%	[30.1-35.0]	3131
Female	22.1%	[20.5-23.9]	4903
Education			
Less Than High School	27.1%	[22.0-32.8]	633
High School	27.2%	[24.5-30.1]	2153
Some College	29.8%	[26.8-33.0]	1939
College Degree or More	25.3%	[23.1-27.6]	3274
Region*			
Western	22.1%	[19.4-25.0]	1671
Central	22.1%	[18.4-26.2]	933
Capital	23.1%	[19.3-27.4]	931
Metro	29.3%	[27.4-31.3]	4502
Insurance*	23.1%	[20.3-26.1]	1906
Public	26.4%	[24.6-28.2]	4973
Private	36.4%	[31.9-41.2]	965
None	23.1%	[20.3-26.1]	1906

Estimate	C.I.	N
4.6%	[3.0-7.1]	543
4.6%	[3.1-6.6]	1217
5.4%	[3.9-7.4]	1576
2.6%	[1.6-4.1]	1597
1.7%	[1.0-3.0]	1335
0.8%	[0.5-1.3]	1610
1.9%	[1.4-2.5]	6048
6.6%	[4.6-9.3]	783
6.8%	[4.8-9.6]	721
3.2%	[1.8-5.6]	497
3.4%	[2.5-4.4]	3134
3.4%	[2.7-4.3]	4912
4.9%	[3.0-7.9]	620
		2149
		1949
1.9%		3294
4.9%	[3.0-7.9]	620
2.5%	[1.7-3.6]	1676
		938
2.5%		934
4.0%	[3.2-4.9]	4501
3.7%	[2.7-5.1]	1906
		5011
		943
		1906
	4.6% 5.4% 2.6% 1.7% 0.8% 	4.6% $[3.1-6.6]$ $5.4%$ $[3.9-7.4]$ $2.6%$ $[1.6-4.1]$ $1.7%$ $[1.0-3.0]$ $0.8%$ $[0.5-1.3]$ $0.8%$ $[0.5-1.3]$ $1.9%$ $[1.4-2.5]$ $6.6%$ $[4.6-9.3]$ $6.8%$ $[4.8-9.6]$ $3.2%$ $[1.8-5.6]$ $3.4%$ $[2.5-4.4]$ $3.4%$ $[2.7-4.3]$ $4.9%$ $[3.0-7.9]$ $4.1%$ $[3.0-5.6]$ $4.3%$ $[3.1-6.0]$ $1.9%$ $[1.3-2.8]$ $4.9%$ $[3.0-7.9]$ $4.1%$ $[3.0-7.9]$ $4.9%$ $[3.0-7.9]$ $4.9%$ $[3.0-7.9]$ $4.9%$ $[3.0-7.9]$ $4.9%$ $[3.2-4.9]$ $2.5%$ $[1.4-4.2]$ $4.0%$ $[3.2-4.9]$ $3.7%$ $[2.7-5.1]$ $2.6%$ $[2.0-3.3]$ $5.9%$ $[3.9-8.8]$

## DT. 4-80d Percentage of Adults Who Noticed Tobacco Advertising Or Promotions At Least Once A Day On Leaflets by Demographic Characteristics, ATS 2004.

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Category	Estimate	C.I.	N
18-24	4.8%	[3.1-7.3]	558
25-34	5.5%	[3.9-7.7]	1237
35-44	2.1%	[1.4-3.1]	1589
45-54	1.8%	[1.1-2.9]	1618
55-64	1.2%	[0.7-2.0]	1348
65 + years	0.3%	[0.1-1.0]	1631
Race*			
White (non-Hispanic)	1.9%	[1.5-2.5]	6097
Black (non-Hispanic)	4.1%	[2.6-6.4]	796
Hispanic	3.2%	[1.9-5.5]	743
Other	3.5%	[2.1-5.8]	521
Gender			
Male	2.5%	[1.9-3.4]	3166
Female	2.6%	[2.0-3.4]	4988
Education			
Less Than High School	1.2%	[0.5-3.0]	651
High School	2.2%	[1.4-3.3]	2191
Some College	3.3%	[2.3-4.6]	1961
College Degree or More	2.7%	[2.0-3.6]	3318
Region			
Western	2.6%	[1.6-4.2]	1684
Central	1.7%	[0.9-3.3]	945
Capital	3.2%	[1.7-6.0]	945
Metro	2.6%	[2.0-3.3]	4583
18-24	4.8%	[3.1-7.3]	558
Insurance			
Public	2.0%	[1.3-3.1]	1945
Private	2.8%	[2.2-3.5]	5050
None	2.5%	[1.5-4.3]	967

# DT. 4-80e Percentage of Adults Who Noticed Tobacco Advertising Or Promotions At Least Once A Day Over The Internet by Demographic Characteristics, ATS 2004.

DT. 4-81 Percentage of Middle and High School Students Who
Would Wear Tobacco Branded Attire by Demographic
Characteristics, YTS 2004

Category	Estimate	C.I.	Ν
Middle School			
Gender*			
Female	14.7%	[12.6-17.2]	1880
Male	26.8%	[23.9-30.0]	1752
Race			
White	20.7%	[17.8-24.1]	1462
Black	19.9%	[16.0-24.3]	733
Hispanic	22.9%	[20.0-26.2]	904
Other	20.5%	[13.6-29.7]	387
Grade*			
6th	15.3%	[12.7-18.5]	933
7th	21.4%	[17.9-25.5]	1434
8th	24.8%	[21.5-28.3]	1286
Region			
Rest of State	20.4%	[17.5-23.7]	1977
New York City	20.8%	[18.6-23.1]	1676
High School			
Gender*			
Female	23.4%	[21.2-25.8]	2243
Male	34.1%	[30.9-37.4]	1869
<b>D</b>			
Race*	21 (0)	[00 7 04 7]	1070
White	31.6%	[28.7-34.7]	1972
Black	15.9%	[12.5-20.1]	659
Hispanic	26.7%	[23.2-30.6]	845
Other	23.7%	[18.5-29.8]	549
Grade			
9th	24.9%	[21.2-28.9]	1278
10th	29.5%	[25.8-33.4]	1075
11th	29.5%	[25.9-33.2]	884
12th	29.6%	[24.2-35.5]	911
1201	27.070	[27.200.0]	711
Region*			
Rest of State	30.8%	[28.0-33.8]	2488

Category	Estimate	C.I.	Ν
Middle School			
Gender			
Female	66.8%	[62.4-71.0]	1862
Male	65.0%	[60.7-69.1]	1723
Race*			
White	71.5%	[66.9-75.7]	1459
Black	58.2%	[54.9-61.4]	702
Hispanic	57.6%	[53.0-62.0]	884
Other	62.6%	[52.0-72.2]	394
Grade*			
6th	56.8%	[51.6-61.8]	915
7th	65.1%	[61.1-68.9]	1387
8th	75.0%	[69.8-79.5]	1303
Region*			
Rest of State	69.5%	[64.9-73.7]	1931
New York City	58.7%	[53.3-63.8]	1674
High School			
Gender*			
Female	75.0%	[72.1-77.6]	2236
Male	68.4%	[63.9-72.6]	1854
Race*			
White	76.5%	[73.9-78.8]	1964
Black	63.0%	[58.5-67.3]	653
Hispanic	64.1%	[56.0-71.6]	849
Other	73.1%	[66.4-78.9]	541
Grade			
9th	74.0%	[68.9-78.4]	1275
10th	70.8%	[66.0-75.1]	1069
11th	70.2%	[65.8-74.3]	878
12th	73.0%	[67.8-77.5]	905
Region*			
Rest of State	74.8%	[72.4-76.9]	2479
New York City	66.8%	[60.5-72.6]	1648

### DT. 4-82 Percentage of Middle and High School Students Who Have Seen Tobacco Advertising on the Internet by Demographic Characteristics, YTS 2004

### DT. 4-83 Percentage of Middle and High School Students Who Have Seen Tobacco Advertising in Newspapers or Magazines by Demographic Characteristics, YTS 2004

Category	Estimate	C.I.	Ν
Middle School			
Gender*			
Female	66.5%	[62.9-70.0]	1809
Male	57.1%	[52.4-61.6]	1685
Race*			
White	64.9%	[60.0-69.6]	1432
Black	61.5%	[57.0-65.9]	687
Hispanic	57.9%	[53.4-62.3]	859
Other	55.7%	[46.5-64.5]	376
Grade*			
6th	52.1%	[47.8-56.4]	891
7th	64.8%	[60.5-68.9]	1376
8th	68.2%	[64.1-72.0]	1247
Region			
Rest of State	62.8%	[58.0-67.2]	1919
New York City	60.1%	[55.3-64.7]	1595
High School			
Gender*			
Female	81.3%	[79.5-83.0]	2230
Male	70.4%	[65.9-74.4]	1847
Race*			
White	79.0%	[76.5-81.4]	1965
Black	72.8%	[69.3-76.0]	647
Hispanic	72.9%	[68.8-76.6]	844
Other	71.4%	[62.1-79.2]	539
Grade			
9th	75.2%	[71.0-78.9]	1275
10th	73.6%	[69.3-77.5]	1062
11th	78.3%	[74.2-81.8]	873
12th	80.1%	[77.5-82.5]	904
Region*			
Rest of State	78.3%	[76.2-80.2]	2479
New York City	72.8%	[69.7-75.7]	1635

Category	Estimate	C.I.	Ν
Age*			
18-24	86.6%	[82.2-90.1]	505
25-34	80.0%	[76.1-83.3]	1121
35-44	73.7%	[70.4-76.8]	1489
45-54	67.0%	[63.4-70.4]	1495
55-64	61.3%	[57.3-65.2]	1248
65 + years	58.1%	[54.6-61.5]	1497
Race			
White (non-Hispanic)	70.8%	[69.2-72.4]	5637
Black (non-Hispanic)	72.9%	[68.3-77.1]	728
Hispanic	72.8%	[67.7-77.5]	675
Other	64.4%	[57.6-70.6]	467
Gender*			
Male	74.4%	[72.0-76.6]	2932
Female	67.8%	[65.9-69.7]	4572
Education			
Less Than High School	68.1%	[61.8-73.7]	557
High School	70.9%	[67.9-73.8]	2009
Some College	72.9%	[69.9-75.7]	1850
College Degree or More	70.4%	[68.1-72.6]	3060
Region*			
Western	74.0%	[71.1-76.7]	1601
Central	74.5%	[70.5-78.0]	875
Capital	75.2%	[71.2-78.8]	864
Metro	69.2%	[67.2-71.2]	4167
Insurance*			
Public	67.2%	[64.1-70.3]	1760
Private	72.1%	[70.3-73.9]	4713
None	72.1%	[67.7-76.9]	865
NULLE	12.370	[07.7-70.9]	000

### DT. 4-84 Percentage of Adults Who Have Seen Antismoking Advertising on Television by Demographic Characteristics, ATS 2004

### DT. 4-85 Percentage of Adults Who Have Seen Advertising About Family Members Losing a Loved One Due to Smoking-Related Illnesses by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	Ν
Age*			
18-24	58.9%	[53.2-64.4]	558
25-34	48.2%	[44.2-52.2]	1245
35-44	47.6%	[44.2-51.1]	1595
45-54	46.5%	[43.0-50.1]	1609
55-64	47.4%	[43.6-51.3]	1348
65 + years	40.6%	[37.3-44.0]	1623
Race*			
White (non-Hispanic)	45.0%	[43.3-46.8]	6086
Black (non-Hispanic)	52.9%	[48.0-57.8]	800
Hispanic	55.9%	[50.8-60.9]	748
Other	42.3%	[36.1-48.7]	516
	42.070	[30.1 40.7]	510
Gender*			
Male	45.8%	[43.3-48.3]	3179
Female	49.2%	[47.2-51.2]	4968
Education*			
Less Than High School	50.5%	[44.7-56.3]	642
High School	50.7%	[47.6-53.8]	2179
Some College	50.0%	[46.7-53.3]	1966
College Degree or More	43.4%	[41.0-45.8]	3326
Region			
Western	47.6%	[44.4-50.9]	1686
Central	45.9%	[41.6-50.2]	944
Capital	53.6%	[49.2-57.9]	948
Metro	47.1%	[45.0-49.2]	4572
Insurance*			
Public	48.0%	[44.7-51.3]	1931
Private	46.4%	[44.4-48.4]	5046
None	52.6%	[47.8-57.3]	974

DT. 4-86 Percentage of Adult Smokers Who Have Seen Advertising
About Family Members Losing a Loved One Due to Smoking-
Related Illnesses by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	Ν
Age*			
18-24	61.7%	[52.7-70.0]	218
25-34	47.4%	[40.2-54.8]	336
35-44	48.0%	[41.2-54.9]	416
45-54	49.7%	[42.3-57.2]	397
55-64	39.0%	[30.8-47.9]	244
65 + years	39.6%	[29.9-50.3]	156
_			
Race			
White (non-Hispanic)	47.8%	[44.0-51.6]	1325
Black (non-Hispanic)	48.9%	[39.4-58.5]	184
Hispanic	58.0%	[46.8-68.4]	168
Other	47.5%	[34.0-61.4]	109
Gender			
Male	49.6%	[44.6-54.5]	780
Female	49.3%	[44.8-53.8]	1005
Education			
Less Than High School	54.7%	[44.7-64.4]	210
High School	50.8%	[45.1-56.5]	634
Some College	50.9%	[44.8-57.0]	515
College Degree or More	42.1%	[35.6-48.8]	424
Region			
Western	44.8%	[38.2-51.6]	412
Central	50.7%	[42.1-59.3]	249
Capital	50.9%	[41.9-59.9]	238
Metro	50.3%	[45.6-55.1]	887
Insurance			
Public	54.7%	[47.8-61.5]	412
Private	45.8%	[41.4-50.2]	984
None	54.1%	[46.6-61.5]	352

#### DT. 4-87 Percentage of Adult Smokers Who Have Noticed Advertising About the Dangers of Children Being Exposed to Cigarette Smoke by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	Ν
Age			
18-24	67.9%	[59.3-75.5]	218
25-34	68.9%	[61.9-75.2]	337
35-44	64.8%	[57.9-71.2]	416
45-54	69.4%	[63.0-75.2]	403
55-64	65.5%	[56.2-73.7]	246
65 + years	70.0%	[60.4-78.2]	159
Race*			
White (non-Hispanic)	64.3%	[60.6-67.9]	1334
Black (non-Hispanic)	69.8%	[60.0-78.0]	185
Hispanic	83.5%	[74.7-89.6]	169
Other	56.3%	[42.4-69.3]	110
	00.070		
Gender*			
Male	64.3%	[59.5-68.8]	783
Female	70.9%	[66.7-74.8]	1014
Education*			
Less Than High School	77.5%	[69.1-84.1]	214
High School	65.5%	[59.8-70.8]	639
Some College	72.7%	[67.2-77.5]	518
College Degree or More	57.6%	[50.8-64.1]	424
Region			
Western	70.4%	[63.9-76.1]	414
Central	73.3%	[65.5-79.8]	251
Capital	66.4%	[57.2-74.5]	242
Metro	65.6%	[61.1-69.9]	891
Insurance			
Public	72.4%	[65.8-78.1]	416
Private	64.9%	[60.5-69.0]	992
None	69.7%	[62.7-75.9]	350

Category	Estimate	C.I.	Ν
Age			
18-24	60.7%	[51.9-68.9]	217
25-34	59.0%	[51.6-66.1]	335
35-44	52.6%	[45.7-59.5]	417
45-54	53.6%	[46.2-60.9]	403
55-64	52.6%	[43.8-61.4]	248
65 + years	58.1%	[47.9-67.6]	158
Race			
White (non-Hispanic)	57.0%	[53.2-60.7]	1332
Black (non-Hispanic)	62.1%	[52.1-71.1]	187
Hispanic	52.0%	[41.1-62.8]	167
Other	44.4%	[31.5-58.1]	111
	11170		
Gender			
Male	53.7%	[48.7-58.6]	778
Female	59.2%	[54.8-63.5]	1018
Education			
Less Than High School	51.2%	[41.3-61.1]	213
High School	53.8%	[48.1-59.5]	637
Some College	60.9%	[55.0-66.6]	517
College Degree or More	58.1%	[51.5-64.4]	427
	50.170	[31:3-04:4]	427
Region			
Western	55.7%	[48.8-62.5]	414
Central	51.3%	[42.6-59.9]	250
Capital	57.6%	[48.5-66.2]	239
Metro	57.3%	[52.6-61.9]	894
Insurance			
Public	61.4%	[54.6-67.8]	418
Private	57.1%	[52.6-61.4]	989
None	52.6%	[45.1-60.1]	350

# DT. 4-88 Percentage of Adult Smokers Who Have Noticed Advertisements About Calling a Quitline by Demographic Characteristics, ATS 2004

### DT. 4-90a Percentage of Adults Who Reported Confirmed Awareness of Media Campaign Advertisements (Statewide and Local) by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	Ν
Age*			
18-24	11.8%	[8.8-15.7]	563
25-34	17.0%	[14.3-20.1]	1254
35-44	14.3%	[12.0-17.0]	1614
45-54	13.4%	[11.1-16.2]	1638
55-64	11.2%	[9.1-13.8]	1362
65 + years	15.0%	[12.7-17.7]	1654
Race*	15.4%	[14 2 16 7]	6168
White (non-Hispanic)		[14.2-16.7]	
Black (non-Hispanic)	12.1% 13.1%	[9.3-15.6]	813 760
Hispanic		[10.0-16.9]	
Other	8.5%	[5.9-12.1]	526
Gender*			
Male	12.2%	[10.6-13.9]	3212
Female	15.7%	[14.4-17.2]	5052
Education*			
Less Than High School	8.4%	[5.9-12.0]	656
High School	13.5%	[11.7-15.6]	2218
Some College	18.3%	[15.9-21.0]	1990
College Degree or More	13.1%	[11.5-14.8]	3365
	13.170	[11.5-14.6]	3305
Region*			
Western	22.6%	[20.1-25.3]	1706
Central	19.2%	[15.6-23.3]	956
Capital	23.3%	[19.8-27.2]	958
Metro	10.5%	[9.2-11.9]	4647
Insurance*			
Public	15.6%	[13.3-18.1]	1969
Private	14.7%	[13.3-16.1]	5112
None	10.2%	[7.8-13.1]	983

### DT. 4-90b Percentage of Adults Who Reported Confirmed Awareness of Media Campaign Advertisements and Said that the Ad Said Something Important to Them (Statewide and Local) by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	Ν
Age			
18-24	92.8%	[87.9-97.6]	69
25-34	93.1%	[89.2-97.0]	200
35-44	90.2%	[84.8-95.7]	198
45-54	93.4%	[88.9-97.9]	209
55-64	94.2%	[89.7-98.6]	163
65 + years	88.0%	[82.6-93.4]	221
Race			
White (non-Hispanic)	92.5%	[90.4-94.6]	860
Black (non-Hispanic)	90.1%	[83.6-96.5]	89
Hispanic	89.7%	[81.7-97.6]	91
Other	89.0%	[81.2-96.8]	47
Gender			
Male	89.4%	[85.5-93.3]	333
Female	93.2%	[91.1-95.3]	753
Education			
Less Than High School	84.4%	[71.7-97.0]	58
High School	91.8%	[87.9-95.7]	305
Some College	91.3%	[87.8-94.8]	319
College Degree or More	92.8%	[89.6-96.0]	398
Region			
Western	89.5%	[86.0-93.0]	383
Central	93.0%	[87.3-98.8]	134
Capital	92.6%	[87.9-97.3]	197
Metro	92.1%	[88.9-95.2]	373
Insurance			
Public	89.7%	[85.3-94.0]	282
Private	92.7%	[90.3-95.0]	683
None	88.8%	[81.0-96.6]	100

#### DT. 4-90c Percentage of Adults Who Reported Confirmed Awareness of Media Campaign Advertisements and Said that they Had Talked to Someone About the Ad(Statewide and Local) by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	Ν
Age			
18-24	23.7%	[8.8-38.6]	71
25-34	34.2%	[25.2-43.3]	204
35-44	21.5%	[14.3-28.7]	201
45-54	19.4%	[12.8-26.0]	210
55-64	26.9%	[16.9-36.9]	165
65 + years	18.3%	[10.8-25.7]	231
Race*			
White (non-Hispanic)	17.6%	[14.2-21.0]	879
Black (non-Hispanic)	34.9%	[21.0-48.7]	89
Hispanic	39.8%	[26.4-53.1]	94
Other	42.4%	[23.8-61.0]	49
Gender			
Male	21.5%	[15.2-27.7]	342
Female	25.6%	[21.3-29.9]	768
Education			
Less Than High School	29.0%	[11.4-46.6]	64
High School	25.7%	[19.1-32.2]	308
Some College	24.3%	[17.7-30.9]	327
College Degree or More	20.9%	[14.8-27.0]	405
Region*			
Western	21.2%	[15.7-26.7]	389
Central	7.0%	[3.1-10.9]	135
Capital	16.2%	[10.1-22.4]	201
Metro	31.2%	[25.0-37.5]	386
Insurance*			
Public	30.4%	[22.0-38.8]	291
Private	18.8%	[14.9-22.7]	695
None	33.3%	[20.6-46]	102

Category	Estimate	C.I.	Ν
Middle School	LStindle	0.1.	IN
Gender			
Female	32.2%	[27.8-37.0]	1410
Male	32.5%	[27.9-37.4]	1264
	02.070	[27.7 07.1]	1201
Race			
White	35.7%	[28.2-44.0]	965
Black	31.3%	[28.1-34.8]	664
Hispanic	28.2%	[25.6-31.0]	729
Other	27.9%	[22.2-34.4]	224
Grade*			
6th	25.1%	[20.8-30.0]	678
7th	34.3%	[30.4-38.5]	1112
8th	37.5%	[31.0-44.4]	903
Region*			
Rest of State	35.0%	[29.2-41.4]	1452
New York City	27.3%	[22.7-32.4]	1241
High School			
Gender			
Female	36.2%	[27.8-45.6]	1826
Male	36.5%	[25.9-48.6]	1474
Race			
White	38.7%	[27.1-51.9]	1624
Black	33.9%	[29.1-39.1]	497
Hispanic	34.9%	[29.1-41.1]	664
Other	27.4%	[22.3-33.2]	450
<u>Out du</u>			
Grade	20 ( ) (		055
9th	39.6%	[29.6-50.6]	955
10th	36.5%	[22.1-53.7]	882
11th	37.8%	[29.7-46.6]	758
12th	29.4%	[24.9-34.4]	736
Decien			
Region	20 50/		2004
Rest of State	39.5%	[27.4-53.0]	2084
New York City	28.1%	[26.9-29.3]	1247

# DT. 4-94a Percentage of Middle and High School Students Who Were Aware of Reality Check by Demographic Characteristics, YTS 2004

### DT. 4-94b Percentage of Middle and High School Students Who Had Participated in Reality Check Events by Demographic Characteristics, YTS 2004

Category	Estimate	C.I.	Ν
Middle School			
Gender			
Female	5.3%	[3.1-8.9]	1403
Male	7.1%	[5.1-9.8]	1248
Race			
White	5.5%	[3.2-9.3]	958
Black	7.0%	[4.7-10.3]	663
Hispanic	7.7%	[4.9-11.7]	718
Other	7.3%	[3.4-14.8]	220
Grade			
6th	4.9%	[3.1-7.6]	664
7th	6.5%	[4.0-10.5]	1107
8th	7.4%	[3.9-13.8]	899
Region			
Rest of State	6.2%	[4.1-9.4]	1438
New York City	6.4%	[3.2-12.5]	1232
High School			
Gender			
Female	8.0%	[3.2-18.7]	1808
Male	10.0%	[5.2-18.5]	1461
Race			
White	10.2%	[3.8-24.6]	1614
Black	8.3%	[4.8-14.2]	493
Hispanic	5.4%	[3.9-7.4]	652
Other	7.1%	[4.3-11.5]	445
Grade*			
9th	9.5%	[4.5-19.1]	949
10th	9.6%	[3.2-25.6]	872
11th	12.0%	[6.1-22.3]	756
12th	3.7%	[2.4-5.7]	724
Region			
Rest of State	10.5%	[4.3-23.4]	2070
New York City	4.9%	[2.2-10.5]	1231

#### DT. 4-95a Percentage of Middle and High School Students Who Participated in an Awareness Event, Among Those Who Attended Any Reality Check Event by Demographic Characteristics, YTS 2004

Category	Estimate	C.I.	Ν
Middle School	201111010		
Gender			
Female	51.6%	[30.1-72.4]	54
Male	62.3%	[45.4-76.7]	77
Race			
White	51.3%	[28.5-73.6]	41
Black	61.0%	[43.6-76.1]	36
Hispanic	57.6%	[47.2-67.4]	44
Other	59.4%	[38.4-77.5]	9
Grade			
6th	62.6%	[49.9-73.7]	25
7th	61.6%	[48.4-73.2]	66
8th	48.4%	[24.6-72.9]	43
Region			
Rest of State	56.3%	[38.9-72.4]	67
New York City	57.2%	[48.7-65.3]	67
High School			
Gender			
Female	61.0%	[42.2-77.1]	108
Male	52.2%	[38.5-65.6]	114
Race			
White	53.7%	[37.3-69.4]	123
Black	73.4%	[59.1-84.1]	34
Hispanic	46.6%	[31.7-62.0]	33
Other	60.0%	[32.4-82.4]	27
-			
Grade			
9th	64.3%	[48.6-77.5]	67
10th	48.3%	[35.6-61.1]	63
11th	55.6%	[31.0-77.7]	61
12th	62.2%	[32.3-85.0]	35
Decien			
Region	F( 70/	[40 1 71 0]	170
Rest of State	56.7%	[40.1-71.9]	173
New York City	57.1%	[41.3-71.5]	53

#### DT. 4-95b Percentage of Middle and High School Students Who Participated in Media Related Activities, Among Those Who Attended Any Reality Check Event by Demographic Characteristics, YTS 2004

Category	Estimate	C.I.	Ν
Middle School	Lotiniato	0.111	
Gender			
Female	31.7%	[18.3-48.9]	55
Male	38.9%	[22.7-58.0]	73
Race			
White	29.7%	[17.6-45.4]	43
Black	39.3%	[18.4-65.0]	37
Hispanic	40.6%	[21.1-63.6]	38
Other	47.6%	[16.5-80.6]	10
Grade			
6th	39.9%	[15.4-70.9]	25
7th	32.8%	[18.4-51.5]	65
8th	37.2%	[27.8-47.6]	41
Region			
Rest of State	34.7%	[20.1-52.8]	70
New York City	39.0%	[24.4-56.0]	61
High School			
Gender	11.00/	<b>54 0 40 01</b>	100
Female	14.9%	[4.3-40.3]	100
Male	39.9%	[30.4-50.1]	112
Race	27.00/		110
White	27.9%	[17.4-41.5]	119
Black	<u>15.2%</u> 28.2%	[6.0-33.6]	33 32
Hispanic Other	35.3%	[13.2-50.5] [17.9-57.6]	26
Other	33.3%	[17.9-57.0]	20
Grade			
9th	31.2%	[18.0-48.3]	64
10th	23.2%	[17.6-29.9]	63
11th	26.0%	[13.6-43.8]	57
12th	26.2%	[10.2-52.5]	32
1201	20.275		52
Region			
Rest of State	25.8%	[16.9-37.3]	162
New York City	32.0%	[27.8-36.5]	54

#### DT. 4-95c Percentage of Middle and High School Students Who Participated in a Training/Workshop, Among Those Who Attended Any Reality Check Event by Demographic Characteristics, YTS 2004

Category	Estimate	C.I.	Ν
Middle School			
Gender			
Female	45.0%	[22.3-70.0]	53
Male	41.7%	[29.1-55.5]	75
Race			
White	46.7%	[30.3-63.8]	41
Black	42.5%	[25.6-61.4]	37
Hispanic	29.3%	[16.0-47.4]	41
Other	51.4%	[11.4-89.7]	9
Grade			
6th	55.9%	[33.7-75.9]	24
7th	33.3%	[20.6-49.0]	63
8th	49.5%	[19.8-79.5]	44
Region			
Rest of State	49.9%	[31.0-68.8]	69
New York City	32.5%	[24.4-41.7]	62
High School			
Gender			
Female	36.8%	[26.3-48.9]	100
Male	38.0%	[31.0-45.5]	111
Race			
White	32.6%	[24.6-41.6]	121
Black	53.6%	[35.5-70.8]	31
Hispanic	38.1%	[14.1-69.9]	32
Other	49.9%	[25.2-74.7]	26
Grade			
9th	37.3%	[27.5-48.2]	66
10th	28.2%	[17.7-41.8]	61
11th	42.3%	[28.2-57.9]	55
12th	42.8%	[22.8-65.4]	33
Region*			
Rest of State	32.8%	[26.4-40.0]	164
New York City	59.2%	[37.9-77.5]	51

#### DT. 4-95d Percentage of Middle and High School Students Who Participated in a Meeting of a Local Group, Among Those Who Attended Any Reality Check Event by Demographic Characteristics, YTS 2004

Category	Estimate	C.I.	Ν
Middle School	Lotinidito		
Gender			
Female	30.5%	[17.6-47.5]	56
Male	38.4%	[26.1-52.4]	74
Race			
White	29.7%	[16.0-48.4]	41
Black	35.7%	[15.3-63.1]	38
Hispanic	41.7%	[27.5-57.3]	41
Other	27.2%	[4.4-75.4]	10
Grade			
6th	35.3%	[17.1-59.0]	25
7th	31.1%	[18.5-47.3]	66
8th	36.0%	[23.9-50.2]	42
Region			
Rest of State	33.3%	[20.1-49.8]	70
New York City	34.8%	[30.0-40.0]	63
High School			
Gender			
Female	47.1%	[38.1-56.3]	103
Male	43.8%	[34.5-53.5]	109
Race			
White	40.7%	[31.3-50.9]	118
Black	55.4%	[31.5-77.1]	31
Hispanic	47.9%	[27.4-69.1]	33
Other	62.9%	[35.8-83.7]	27
Grade			
9th	47.8%	[37.8-58.1]	67
10th	48.0%	[36.5-59.7]	61
11th	42.2%	[28.8-56.9]	56
12th	27.6%	[12.7-50.1]	32
Decien			
Region	45.404		1/4
Rest of State	45.4%	[38.2-52.9]	164
New York City	39.6%	[13.4-73.4]	52

# DT. 4-95e Percentage of Middle and High School Students Who Meet with an Official, Among Those Who Attended Any Reality Check Event by Demographic Characteristics, YTS 2004

Category	Estimate	C.I.	Ν
Middle School			
Gender			
Female	35.3%	[24.6-47.7]	56
Male	46.0%	[33.3-59.2]	76
Race*			
White	36.7%	[27.1-47.5]	43
Black	63.5%	[42.4-80.5]	39
Hispanic	39.0%	[29.8-49.0]	41
Other	0.0%	[0.0-0.0]	9
Grade*			
6th	69.2%	[54.3-81.0]	24
7th	33.3%	[18.9-51.6]	66
8th	37.9%	[28.1-48.7]	45
Region			
Rest of State	40.0%	[29.6-51.3]	72
New York City	47.2%	[42.8-51.6]	63
High School			
Gender			
Female	25.1%	[19.4-31.8]	102
Male	34.7%	[24.4-46.7]	106
Race			
White	27.8%	[21.2-35.5]	117
Black	29.6%	[14.3-51.4]	31
Hispanic	44.1%	[19.5-72.0]	33
Other	23.8%	[7.4-54.9]	25
Grade			
9th	29.2%	[20.9-39.1]	64
10th	19.5%	[14.2-26.0]	61
11th	33.5%	[21.7-47.7]	55
12th	47.7%	[23.7-72.8]	32
Region*			
Rest of State	26.3%	[20.7-32.9]	160
New York City	45.0%	[40.3-49.8]	52

Category	Estimate	C.I.	Ν
Age*			
18-24	55.9%	[50.1-61.6]	552
25-34	65.1%	[61.2-68.9]	1208
35-44	70.3%	[67.0-73.4]	1571
45-54	72.1%	[68.9-75.1]	1591
55-64	74.1%	[70.5-77.4]	1293
65 + years	77.9%	[74.8-80.6]	1490
Race			
White (non-Hispanic)	68.7%	[67.0-70.4]	5895
Black (non-Hispanic)	70.2%	[65.3-74.8]	757
Hispanic	71.6%	[66.9-75.9]	720
Other	72.2%	[66.0-77.6]	489
Gender*			
Male	61.0%	[58.5-63.5]	3041
Female	77.4%	[75.6-79.0]	4817
Education			
Less Than High School	70.2%	[64.3-75.5]	594
High School	68.9%	[65.9-71.8]	2110
Some College	72.7%	[69.6-75.6]	1880
College Degree or More	67.9%	[65.5-70.2]	3242
Region	74 70/		1/0/
Western	71.7%	[68.5-74.6]	1636
Central	67.4%	[62.8-71.7]	905
Capital	67.7%	[63.1-72.0]	921
Metro	69.7%	[67.7-71.6]	4399
Insurance*			
Public	74.9%	[71.7-77.8]	1810
Private	68.7%	[66.8-70.5]	4919
None	68.4%	[63.8-72.8]	938
NULIE	00.470	[03.0-72.8]	730

### DT. 4-104 Percentage of Adults Who Agree That Movies Rated G, PG, and PG-13 Should Not Show Actors Smoking by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	Ν
Age*			
18-24	60.4%	[54.4-66.0]	548
25-34	63.5%	[59.6-67.3]	1210
35-44	70.6%	[67.2-73.8]	1567
45-54	72.5%	[69.1-75.6]	1570
55-64	71.2%	[67.2-74.9]	1297
65 + years	67.5%	[64.0-70.9]	1485
Race*			
White (non-Hispanic)	71.9%	[70.2-73.5]	5835
Black (non-Hispanic)	63.1%	[58.1-67.9]	770
Hispanic	59.3%	[54.1-64.3]	733
Other	62.0%	[55.4-68.1]	496
Gender*			
Male	63.2%	[60.6-65.7]	3030
Female	72.3%	[70.4-74.1]	4801
Education*			
Less Than High School	58.7%	[52.7-64.4]	614
High School	63.0%	[59.8-66.1]	2099
Some College	68.5%	[65.2-71.7]	1880
College Degree or More	73.4%	[71.1-75.7]	3207
Device			
Region	70.00/		1/05
Western	70.9%	[67.7-73.9]	1625
Central	68.3%	[63.9-72.5]	910
Capital	71.8%	[67.4-75.8]	899
Metro	66.9%	[64.8-68.9]	4400
Insurance*			
Public	64.8%	[61.4-68.1]	1819
Private	71.8%	[69.9-73.6]	4895
None	58.4%	[53.5-63.1]	932

# DT. 4-105 Percentage of Adults Who Disagree With The Statement "Smoking In The Movies Does Not Encourage Smoking Among Teens," by Demographic Characteristics, ATS 2004

DT. 4-106 Percentage of Middle and High School Students Who
Think Smoking Makes People Look Cool by Demographic
Characteristics, YTS 2004

Category	Estimate	C.I.	Ν
Middle School			
Gender*			
Female	9.2%	[7.9-10.8]	1873
Male	13.2%	[11.2-15.4]	1727
Race*			
White	9.1%	[7.8-10.7]	1450
Black	13.9%	[11.9-16.3]	718
Hispanic	14.5%	[11.4-18.2]	894
Other	13.1%	[9.9-17.1]	384
Grade			
6th	9.0%	[7.0-11.4]	928
7th	11.7%	[9.2-14.8]	1418
8th	12.7%	[11.1-14.5]	1274
Region*			
Rest of State	9.8%	[8.6-11.3]	1959
New York City	13.8%	[12.0-15.7]	1661
High School			
Gender*			
Female	8.7%	[7.0-10.9]	2246
Male	13.7%	[11.4-16.4]	1858
Race*			
White	10.7%	[9.1-12.4]	1970
Black	6.5%	[4.2-10.0]	655
Hispanic	10.5%	[8.2-13.3]	848
Other	17.1%	[12.3-23.2]	548
Grade			
9th	10.5%	[8.1-13.6]	1279
10th	11.7%	[8.5-15.9]	1070
11th	10.3%	[8.3-12.7]	883
12th	11.1%	[9.1-13.5]	909
Region			
Rest of State	10.1%	[8.6-11.9]	2491
New York City	12.4%	[8.3-18.2]	1650

Category	Estimate	C.I.	Ν
Middle School			
Gender*			
Female	7.6%	[6.1-9.3]	1892
Male	11.8%	[9.8-14.2]	1751
Race*			
White	8.7%	[7.1-10.5]	1465
Black	7.8%	[5.3-11.5]	735
Hispanic	13.4%	[10.9-16.2]	905
Other	13.5%	[8.5-20.8]	388
Grade			
6th	8.3%	[6.7-10.4]	944
7th	10.2%	[7.6-13.5]	1436
8th	10.4%	[8.2-13.1]	1285
Region*			
Rest of State	8.2%	[6.8-9.8]	1981
New York City	12.5%	[10.5-14.9]	1684
High School			
Gender*			
Female	8.0%	[7.1-8.9]	2243
Male	13.5%	[10.6-17.2]	1857
Race			
White	10.8%	[9.3-12.4]	1971
Black	7.9%	[4.9-12.4]	653
Hispanic	10.7%	[8.0-14.3]	848
Other	14.1%	[10.7-18.2]	544
Grade			
9th	10.9%	[8.5-14.0]	1279
10th	9.6%	[7.3-12.5]	1073
<u>11th</u>	8.8%	[6.3-12.1]	884
12th	12.4%	[9.3-16.4]	902
Region			0.455
Rest of State	10.6%	[9.3-11.9]	2492
New York City	10.1%	[6.3-15.8]	1646

# DT. 4-107 Percentage of Middle and High School Students Who Think it is Safe to Smoke for Just a Year or Two by Demographic Characteristics, YTS 2004

Category	Estimate	C.I.	Ν
Age*			
18-24	51.8%	[43.1-60.5]	219
25-34	62.6%	[55.3-69.5]	338
35-44	63.2%	[56.1-69.8]	421
45-54	66.3%	[58.6-73.3]	406
55-64	76.6%	[67.6-83.8]	248
65 + years	74.9%	[64.6-82.9]	161
Race			
White (non-Hispanic)	65.5%	[61.7-69.0]	1342
Black (non-Hispanic)	67.6%	[57.5-76.3]	189
Hispanic	52.5%	[41.6-63.1]	170
Other	62.0%	[47.6-74.6]	111
Gender*			
Male	56.1%	[51.1-61.0]	788
Female	72.1%	[67.8-76.0]	1023
Education*			
Less Than High School	55.5%	[45.4-65.1]	215
High School	57.2%	[51.4-62.8]	647
Some College	69.4%	[63.5-74.8]	520
College Degree or More	73.0%	[66.7-78.5]	427
Region			
Western	62.7%	[55.7-69.2]	417
Central	61.9%	[52.9-70.1]	252
Capital	64.8%	[55.9-72.8]	242
Metro	64.2%	[59.4-68.7]	901
			-
Insurance*			
Public	73.0%	[66.3-78.8]	422
Private	73.3%	[69.2-77.0]	999
None	37.8%	[31.1-44.9]	352

### DT. 4-112 Percentage of Adult Smokers Who Visited a Doctor, Nurse, or Other Health Professional in the Past 12 Months by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	N
Age			
18-24	89.2%	[79.1-94.7]	113
25-34	87.0%	[77.9-92.7]	216
35-44	84.0%	[74.7-90.3]	280
45-54	91.9%	[84.6-95.9]	279
55-64	84.1%	[75.2-90.2]	190
65 + years	83.6%	[72.2-91.0]	123
Race			
White (non-Hispanic)	88.6%	[84.9-91.5]	912
Black (non-Hispanic)	81.5%	[68.8-89.8]	139
Hispanic	87.4%	[76.2-93.8]	95
Other	83.7%	[65.1-93.4]	70
		<u> </u>	
Gender			
Male	84.0%	[78.0-88.6]	469
Female	89.5%	[85.5-92.5]	747
Education			
Less Than High School	86.1%	[73.9-93.1]	118
High School	86.5%	[79.4-91.4]	405
Some College	89.0%	[84.3-92.4]	375
College Degree or More	85.7%	[77.7-91.1]	316
Region			
Western	90.2%	[82.1-94.8]	279
Central	91.6%	[84.9-95.5]	164
Capital	89.3%	[81.8-94.0]	161
Metro	84.8%	[79.7-88.8]	612
Insurance			
Public	82.3%	[74.1-88.3]	324
Private	89.5%	[85.2-92.7]	719
None	89.2%	[79.7-94.5]	152

# DT. 4-113 Percentage of Adult Smokers Who Were Asked If They Smoked When They Visited a Health Care Provider in the Past 12 Months by Demographic Characteristics, ATS 2004

### DT. 4-114 Percentage of Adult Smokers Who Were Advised to Quit Smoking When They Visited a Health Care Provider in the Past 12 Months by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	Ν
Age			
18-24	60.7%	[48.1-72.0]	113
25-34	69.6%	[60.3-77.6]	216
35-44	71.3%	[62.5-78.8]	281
45-54	74.3%	[64.5-82.1]	281
55-64	70.4%	[60.3-78.8]	190
65 + years	74.5%	[63.3-83.2]	123
Race			
White (non-Hispanic)	73.0%	[68.4-77.2]	915
Black (non-Hispanic)	62.9%	[51.4-73.2]	138
Hispanic	64.5%	[49.1-77.4]	95
Other	65.8%	[49.2-79.2]	71
Other	05.078	[47.2-77.2]	71
Gender			
Male	66.2%	[59.7-72.2]	475
Female	73.1%	[67.8-77.8]	744
Education*			
Less Than High School	65.4%	[50.9-77.6]	118
High School	64.7%	[57.2-71.5]	408
Some College	78.9%	[72.8-83.9]	374
College Degree or More	69.0%	[60.8-76.2]	316
Region			
Western	71.0%	[62.7-78.2]	279
Central	74.7%	[64.0-83.1]	166
Capital	66.4%	[53.7-77.1]	161
Metro	69.3%	[63.5-74.5]	613
Wetto	07.370	[00.0274.0]	015
Insurance			
Public	69.2%	[60.6-76.6]	324
Private	73.5%	[68.3-78.2]	722
None	62.0%	[50.5-72.4]	152

# DT. 4-115 Percentage of Adult Smokers Who Report that their Health Care Provider Assisted Them with Smoking Cessation When They Visited a Health Care Provider in the Past 12 Months by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	N
Age			
18-24	31.5%	[21.6-43.4]	112
25-34	39.4%	[30.8-48.8]	215
35-44	37.1%	[29.5-45.4]	280
45-54	48.2%	[39.8-56.7]	281
55-64	36.9%	[28.2-46.6]	189
65 + years	31.3%	[21.3-43.5]	121
Race			
White (non-Hispanic)	39.4%	[35.0-44.0]	910
Black (non-Hispanic)	41.6%	[31.6-52.3]	138
Hispanic	26.5%	[16.6-39.5]	95
Other	35.4%	[20.2-54.2]	70
Gender			
Male	37.9%	[32.2-44.1]	472
Female	38.0%	[33.1-43.1]	741
Education*			
Less Than High School	26.3%	[17.6-37.5]	117
High School	40.7%	[34.2-47.6]	406
Some College	45.2%	[38.1-52.5]	371
College Degree or More	31.8%	[25.0-39.4]	316
Region			
Western	41.7%	[33.8-50.0]	278
Central	42.5%	[32.9-52.8]	165
Capital	45.7%	[35.0-56.8]	159
Metro	34.6%	[29.6-40.1]	611
Insurance			
Public	39.8%	[32.4-47.6]	322
Private	39.8%	[34.8-45.0]	719
None	32.6%	[23.7-43.0]	152

Category	Estimate	C.I.	Ν
Age			
18-24	60.8%	[52.0-68.9]	218
25-34	58.6%	[51.0-65.8]	336
35-44	55.4%	[48.4-62.2]	419
45-54	53.1%	[45.6-60.5]	401
55-64	64.0%	[55.1-72.1]	249
65 + years	45.7%	[35.7-56.1]	160
Race			
White (non-Hispanic)	58.6%	[54.8-62.2]	1336
Black (non-Hispanic)	61.3%	[51.5-70.2]	187
Hispanic	49.6%	[39.0-60.3]	170
Other	47.8%	[34.4-61.5]	110
Gender			
Male	59.1%	[54.1-63.9]	783
Female	54.8%	[50.2-59.2]	1019
Education			
Less Than High School	49.3%	[39.4-59.2]	212
High School	54.3%	[48.6-60.0]	643
Some College	62.7%	[56.5-68.5]	518
College Degree or More	59.7%	[53.1-65.9]	427
Region*			
Western	59.0%	[52.2-65.4]	416
Central	48.9%	[40.4-57.6]	250
Capital	77.3%	[69.9-83.4]	240
Metro	54.6%	[49.9-59.3]	897
Insurance			
Public	54.0%	[47.0-60.9]	418
Private	59.4%	[55.0-63.7]	996
None	55.8%	[48.2-63.2]	350

### DT. 4-116 Percentage of Adult Smokers Who Have Heard of the New York State Smokers' Quitline by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	Ν
Age*			
18-24	0.9%	[0.1-5.8]	127
25-34	7.7%	[4.4-13.4]	210
35-44	9.0%	[4.2-18.0]	233
45-54	10.9%	[6.2-18.3]	223
55-64	6.1%	[2.9-12.6]	151
65 + years	4.7%	[1.2-17.0]	75
Race			
White (non-Hispanic)	7.5%	[5.2-10.6]	773
Black (non-Hispanic)	5.5%	[2.1-13.5]	108
Hispanic	2.6%	[0.7-9.2]	95
Other	10.7%	[2.1-40.5]	55
Gender*			
Male	4.5%	[2.4-8.2]	457
Female	9.3%	[6.4-13.4]	573
Education			
Less Than High School	2.3%	[0.7-7.2]	97
High School	5.2%	[3.2-8.4]	357
Some College	7.8%	[4.4-13.3]	319
College Degree or More	10.0%	[5.2-18.6]	255
Region			
Western	7.8%	[4.6-13.0]	256
Central	3.5%	[1.4-8.4]	116
Capital	8.5%	[3.0-21.9]	178
Metro	6.4%	[4.1-9.9]	481
Insurance			
Public	7.9%	[4.8-12.8]	223
Private	7.3%	[4.4-11.7]	588
None	5.2%	[2.6-10.2]	203

# DT. 4-117 Percentage of Adult Smokers Who Have Called the New York State Smokers' Quitline by Demographic Characteristics, ATS 2004

Year	Month	Call Volume	Year	Month	Call Volume
2000	Jan	479	2001	Jan	731
2000	Feb	245	2001	Feb	741
	Mar	76		Mar	1298
	Apr	61		Apr	640
	May	45		May	995
	Jun	99		Jun	741
	Jul	99		Jul	558
	Aug	107		Aug	471
	Sep	93		Sep	294
	Oct	142		Oct	641
	Nov	172		Nov	953
	Dec	508		Dec	834
2002	Jan	1116		Jan	843
2002	Feb	905	2003	Feb	608
	Mar	742		Mar	883
	Apr	679		Apr	473
	May	662		May	529
	Jun	661		Jun	397
	Jul	844		Jul	306
	Aug	1105		Aug	309
	Sep	765		Sep	198
	Oct	677		Oct	239
	Nov	997		Nov	288
	Dec	1115		Dec	281
			1		
2004	Jan	594	2005	Jan	1355
2004	Feb	630	2005	Feb	1529
	Mar	743		Mar	1506
	Apr	754		Apr	1096
	May	741		May	118
	Jun	369			
	Jul	446			
	Aug	468			
	Sep	470			
	Oct	771			
	Nov	738	1		
	Dec	684	1		

# DT.4-118. New York Smokers' Quitline Call Volume, January 2000-April 2005

Year	Quarter	Advertising	Fax To Quit	All Other Referrals	Healthcare Provider
2000	Q1	670	0	103	27
	Q2	59	0	66	80
	Q3	53	0	133	113
	Q4	607	0	132	83
					-
2001	Q1	2,405	0	278	87
	Q2	1,794	0	515	67
	Q3	841	0	394	88
	Q4	1,807	0	481	140
					-
2002	Q1	2,115	0	449	199
	Q2	1,391	0	410	201
	Q3	1,337	0	1,135	242
	Q4	1,781	0	788	220
					-
2003	Q1	1,492	0	604	238
	Q2	585	0	670	144
	Q3	255	0	449	109
	Q4	278	0	385	145
					-
2004	Q1	1,198	1	575	193
	Q2	471	1	1,177	215
	Q3	414	2	749	219
	Q4	776	37	1,130	250
	-				
2005	Q1	2,021	181	1,842	346
	Q2	271	170	536	119

# DT.4-119. Number of Calls to the New York State Smokers' Quitline by Sources of Referral, Q1 2000–Q2 2005

### DT. 4-120 Percentage of Adult Former Smokers or Current Smokers with A Quit Attempt in the Past 12 Months Who Have Used a Nicotine Patch or Nicotine Gum by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	Ν
Age*			
18-24	5.4%	[2.8-10.3]	128
25-34	28.0%	[20.5-37.0]	226
35-44	25.0%	[17.5-34.2]	236
45-54	28.5%	[21.2-37.2]	217
55-64	27.3%	[18.9-37.6]	142
65 + years	25.7%	[15.3-39.8]	87
Race*			
White (non-Hispanic)	25.3%	[21.3-29.8]	742
Black (non-Hispanic)	23.8%	[14.6-36.3]	125
Hispanic	11.0%	[6.2-18.7]	110
Other	13.2%	[7.0-23.5]	70
Gender			
Male	21.2%	[16.3-26.9]	455
Female	24.3%	[20.0-29.3]	591
Education			
Less Than High School	18.7%	[11.3-29.4]	112
High School	22.8%	[17.0-29.9]	363
Some College	26.8%	[20.4-34.4]	283
College Degree or More	20.4%	[14.8-27.5]	287
Region			
Western	27.0%	[20.0-35.3]	205
Central	23.3%	[15.0-34.5]	129
Capital	27.1%	[18.0-38.6]	133
Metro	20.9%	[16.6-26.0]	580
Insurance			
Public	23.8%	[17.5-31.5]	237
Private	25.3%	[20.9-30.4]	610
None	18.4%	[11.0-29.2]	178

Category	Estimate	C.I.	Ν
Age			
18-24	21.0%	[13.9-30.6]	169
25-34	27.5%	[21.0-35.2]	292
35-44	25.2%	[18.6-33.2]	346
45-54	26.5%	[19.9-34.2]	342
55-64	24.2%	[17.0-33.2]	212
65 + years	15.5%	[10.0-23.1]	138
Race			
White (non-Hispanic)	24.5%	[20.9-28.6]	1130
Black (non-Hispanic)	30.3%	[21.2-41.1]	155
Hispanic	20.4%	[13.1-30.2]	136
Other	16.1%	[9.0-27.2]	96
Gender			
Male	25.0%	[20.4-30.3]	658
Female	23.5%	[19.6-27.9]	858
Education			
Less Than High School	26.5%	[17.8-37.4]	171
High School	22.8%	[17.8-28.7]	528
Some College	27.3%	[21.7-33.6]	445
College Degree or More	21.8%	[16.1-28.9]	370
Region*			
Western	16.9%	[12.5-22.6]	354
Central	19.7%	[12.8-29.0]	208
Capital	25.1%	[16.7-36.0]	195
Metro	27.3%	[22.8-32.2]	760
	27.370		,
Insurance			
Public	25.4%	[19.8-31.9]	360
Private	23.0%	[19.1-27.5]	855
None	25.9%	[18.5-34.9]	272

# DT. 4-121 Percentage of Adult Smokers Who Were Planning to Stop Smoking in the Next 30 Days by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	Ν
Age			
18-24	47.2%	[38.7-56.0]	219
25-34	55.0%	[47.6-62.1]	338
35-44	44.0%	[37.2-51.0]	420
45-54	40.6%	[33.9-47.7]	405
55-64	47.2%	[38.5-56.1]	248
65 + years	39.7%	[30.1-50.1]	160
Race*			
White (non-Hispanic)	43.6%	[39.9-47.4]	1341
Black (non-Hispanic)	63.2%	[54.0-71.5]	188
Hispanic	42.0%	[32.4-52.2]	170
Other	42.6%	[30.1-56.1]	111
Gender			
Male	46.9%	[42.0-51.8]	789
Female	45.6%	[41.2-50.1]	1020
Education			
Less Than High School	46.6%	[37.0-56.5]	215
High School	48.3%	[42.7-54.0]	647
Some College	44.7%	[38.8-50.7]	517
College Degree or More	44.3%	[37.8-50.9]	428
Region			
Western	40.7%	[34.3-47.4]	416
Central	49.9%	[41.3-58.5]	252
Capital	49.9%	[34.3-51.8]	242
Metro	47.9%	[43.2-52.6]	900
	47.770	[43.2-32.0]	700
Insurance			
Public	50.5%	[43.6-57.4]	421
Private	45.4%	[41.0-49.8]	998
None	45.5%	[38.2-52.9]	351

### DT. 4-122 Percentage of Smokers Who Made a Quit Attempt in the Past 12 Months by Demographic Characteristics, ATS 2004

Category	Estimate	C.I.	Ν
Age*			
18-24	12.1%	[5.1-26.1]	135
25-34	17.5%	[9.9-29.2]	249
35-44	15.4%	[10.5-22.2]	276
45-54	23.6%	[17.2-31.6]	264
55-64	30.6%	[22.3-40.4]	192
65 + years	57.6%	[46.6-67.9]	152
Race			
White (non-Hispanic)	23.8%	[20.1-28.0]	938
Black (non-Hispanic)	12.7%	[6.5-23.3]	136
Hispanic	25.0%	[13.5-41.6]	129
Other	31.4%	[14.4-55.7]	85
Gender			
Male	21.2%	[16.3-27.1]	556
Female	24.2%	[19.5-29.6]	731
Education*			
Less Than High School	13.2%	[6.9-23.7]	128
High School	20.2%	[14.4-27.6]	428
Some College	19.3%	[12.6-28.4]	330
College Degree or More	32.0%	[25.7-39.0]	397
Region			
Western	19.5%	[13.9-26.6]	250
Central	12.9%	[8.0-20.1]	154
Capital	22.8%	[15.7-31.9]	167
Metro	24.8%	[20.0-30.4]	717
Insurance			
Public	24.0%	[17.6-31.8]	300
Private	24.2%	[20.1-28.8]	765
None	17.8%	[8.9-32.4]	196

# DT. 4-123 Percentage of Smokers Who Made a Successful Quit Attempt in the Past 12 Months (Remained Quit for More Than 6 Months) by Demographic Characteristics, ATS 2004

### DT. 4-129 Percentage of Middle and High School Students Who Have Been Asked for Proof of Age When Purchasing Cigarettes by Demographic Characteristics, YTS 2004

Category	Estimate	C.I.	Ν
Middle School			
Gender			
Female	30.9%	[23.1-40.0]	73
Male	30.2%	[21.0-41.2]	108
Race			
White	33.9%	[22.0-48.2]	43
Black	34.0%	[21.6-49.1]	33
Hispanic	22.0%	[14.0-32.8]	75
Other	23.0%	[8.9-47.6]	24
Grade			
6th	37.9%	[26.7-50.5]	42
7th	23.3%	[15.4-33.6]	71
8th	30.0%	[19.8-42.6]	69
Region			
Rest of State	33.1%	[25.2-42.0]	72
New York City	28.1%	[20.9-36.6]	110
High School			
Gender			
Female	52.7%	[44.6-60.7]	240
Male	54.4%	[46.6-62.0]	304
Race*			
White	58.1%	[52.3-63.8]	306
Black	39.0%	[22.3-58.8]	39
Hispanic	40.8%	[27.8-55.2]	127
Other	48.0%	[30.2-66.3]	56
Grade*			
9th	38.4%	[29.3-48.4]	104
10th	49.4%	[35.7-63.2]	115
11th	57.9%	[45.3-69.5]	130
12th	60.5%	[55.0-65.8]	200
Region			
Rest of State	58.3%	[53.8-62.7]	376
New York City	40.1%	[20.7-63.3]	173

			• •
Category	Estimate	C.I.	N
Middle School			
Gender	27 50/	[20, 1, 47, 0]	70
Female	37.5%	[28.1-47.9]	79
Male	41.1%	[33.5-49.2]	114
Race			
White	48.1%	[36.0-60.5]	49
Black	38.1%	[27.1-50.5]	38
Hispanic	35.3%	[26.9-44.7]	79
Other	38.9%	[20.4-61.3]	22
	30.770	[20.4 01.0]	22
Grade			
6th	36.6%	[26.7-47.7]	47
7th	36.0%	[27.7-45.3]	77
8th	47.0%	[38.2-56.0]	71
Region			
Rest of State	42.8%	[33.9-52.3]	81
New York City	37.1%	[31.3-43.2]	114
High School			
Gender			
Female	32.8%	[25.6-41.0]	240
Male	38.4%	[30.7-46.6]	278
Race			
White	36.3%	[26.9-46.9]	294
Black	29.8%	[18.5-44.4]	39
Hispanic	32.3%	[22.8-43.5]	118
Other	27.4%	[14.0-46.6]	54
Grade*			
9th	42.3%	[31.9-53.4]	100
10th	49.2%	[37.0-61.4]	111
11th	39.0%	[27.8-51.5]	125
12th	21.9%	[15.8-29.5]	187
Decion			
Region	22.20/		257
Rest of State	33.3%	[25.4-42.3]	357
New York City	43.0%	[35.2-51.2]	166

# DT. 4-130 Percentage of Middle and High School Students Who Have Been Refused Sale of Cigarettes Because of Age by Demographic Characteristics, YTS 2004

#### DT. 4-131a/132a Percentage of Middle and High School Current Smokers Who Bought Their Cigarettes in Packs by Demographic Characteristics, YTS 2004

Category	Estimate	C.I.	Ν
Middle School			
Gender*			
Female	35.7%	[28.3-43.8]	99
Male	58.5%	[47.3-68.9]	122
Race			
White	61.1%	[42.6-77.0]	56
Black	42.3%	[27.9-58.1]	42
Hispanic	33.2%	[22.3-46.2]	90
Other	53.3%	[30.8-74.5]	26
Grade			
6th	46.8%	[35.0-58.9]	47
7th	44.9%	[33.2-57.2]	94
8th	55.0%	[37.7-71.2]	81
Region*			
Rest of State	59.4%	[47.0-70.7]	99
New York City	35.6%	[28.0-44.0]	123
High School			
Gender			
Female	80.1%	[76.3-83.4]	362
Male	79.8%	[72.8-85.4]	313
Race*			
White	87.4%	[83.5-90.5]	396
Black	50.2%	[32.1-68.3]	49
Hispanic	64.5%	[52.2-75.1]	141
Other	63.6%	[49.0-76.1]	77
Grade*			
9th	65.6%	[49.6-78.6]	139
10th	73.4%	[67.4-78.6]	161
11th	86.9%	[83.1-90.0]	186
12th	88.4%	[82.1-92.7]	199
Region*			
Rest of State	86.9%	[82.9-90.2]	479
New York City	57.0%	[43.9-69.1]	206

Category	Estimate	C.I.	Ν
Middle School			
Gender*			
Female	64.3%	[56.2-71.7]	99
Male	41.5%	[31.1-52.7]	122
Race			
White	38.9%	[23.0-57.4]	56
Black	57.7%	[41.9-72.1]	42
Hispanic	66.8%	[53.8-77.7]	90
Other	46.7%	[25.5-69.2]	26
Grade			
6th	53.2%	[41.1-65.0]	47
7th	55.1%	[42.8-66.8]	94
8th	45.0%	[28.8-62.3]	81
Region*			
Rest of State	40.6%	[29.3-53.0]	99
New York City	64.4%	[56.0-72.0]	123
High School			
Gender			
Female	19.9%	[16.6-23.7]	362
Male	20.2%	[14.6-27.2]	313
Race*			
White	12.6%	[9.5-16.5]	396
Black	49.8%	[31.7-67.9]	49
Hispanic	35.5%	[24.9-47.8]	141
Other	36.4%	[23.9-51.0]	77
Grade*			
9th	34.4%	[21.4-50.4]	139
10th	26.6%	[21.4-32.6]	161
11th	13.1%	[10.0-16.9]	186
12th	11.6%	[7.3-17.9]	199
Region*			
Rest of State	13.1%	[9.8-17.1]	479
New York City	43.0%	[30.9-56.1]	206

# DT. 4-131b/132b Percentage of Middle and High School Current Smokers Who Bought Their Cigarettes Loose by Demographic Characteristics, YTS 2004

### DT. 4-131c/132c Percentage of Middle and High School Current Smokers Who Bought Their Cigarettes From Independent Sellers by Demographic Characteristics, YTS 2004

Category	Estimate	C.I.	Ν
Middle School			
Gender*			
Female	26.7%	[18.9-36.3]	132
Male	42.2%	[31.3-53.9]	150
Race			
White	40.2%	[24.6-58.0]	67
Black	34.2%	[24.3-45.6]	61
Hispanic	36.9%	[27.9-47.0]	117
Other	27.8%	[13.5-48.9]	27
Grade			
6th	35.4%	[21.2-52.6]	53
7th	34.6%	[28.6-41.1]	115
8th	36.8%	[22.6-53.7]	115
Region			
Rest of State	37.2%	[24.9-51.5]	132
New York City	33.5%	[31.2-35.9]	151
High School			
Gender*			
Female	18.3%	[13.3-24.6]	429
Male	40.9%	[35.4-46.6]	359
Race*			
White	23.7%	[19.3-28.7]	450
Black	61.6%	[44.1-76.5]	62
Hispanic	38.0%	[30.1-46.5]	168
Other	30.4%	[15.9-50.2]	93
Grade			
9th	33.7%	[24.3-44.5]	162
10th	35.1%	[27.7-43.3]	191
11th	25.3%	[15.3-38.7]	213
12th	21.6%	[16.7-27.4]	230
Region*			
Rest of State	24.0%	[20.7-27.6]	550
New York City	42.6%	[34.5-51.2]	246