September 2006

Third 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

RTI Project Number 0208800.004.002

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EXECUTIVE SUMMARY

The 2006 Independent Evaluation Report (IER) is RTI International's (RTI's) third annual assessment of the New York Tobacco Control Program (NYTCP). In previous IERs, we found that, despite being underfunded and constrained by cumbersome bureaucracy, NYTCP has developed a program strategy grounded in evidence-based interventions. Since our first report in 2003, the program has steadily expanded its capacity to implement evidence-based strategies.

The most significant development since the 2005 IER was a doubling in program funding: the fiscal year (FY) 2006–2007 budget is $85 million, or about 90% of the Centers for Disease Control and Prevention's (CDC's) minimum recommended funding level. This increase will allow the program to expand the reach and scope of its activities. The program has already begun to plan to expand existing interventions and create new interventions consistent with the 2005 IER recommendations for how to use additional resources. Such an expansion requires careful planning; identifying, hiring, and training new staff; expanding existing initiatives; developing new initiatives; and gaining the required approvals to spend additional resources. Historically, there have been significant delays associated with the procurement process. Therefore, although the increase in funding is a tremendous opportunity for the program to have a significant impact on tobacco use in New York, it will take years before we would expect to see its full impact.

With respect to addressing other programmatic recommendations from the 2005 IER, progress has been mixed. First, although NYTCP's Community Partnerships aired messages consistent with recommendations in previous IERs and according to the program's media plan, the New York State Department of Health (NYSDOH) aired no countermarketing ads between August 2005 and May 2006, which prevented the program from reaching the recommended reach of the mass media efforts. Second, there have been no significant changes in the program's approach to promoting smoke-free homes. Community Partnerships have been encouraged to consider promoting smoke-free apartment policies, but there has been little activity in this area to date.

ES.1 2006 IER Conclusions and Recommendations

NYTCP continued to expand its capacity to implement tobacco control initiatives statewide in the past year. Overall, the new initiatives are proceeding as planned. Specifically, this report suggests that Cessation Centers have successfully built their capacities and have stepped up their efforts to promote cessation in health care settings. Baseline awareness of key NYTCP-funded resources currently is low among health care providers, which highlights the importance of the Cessation Center initiative. In addition, the program expanded the School Policy Partner initiative. In terms of the program's Advertising, Sponsorship, and Promotion

(ASP) initiatives, baseline data of cigarette retailers suggest that cigarette advertising is pervasive in these establishments. Further, initial attempts by Partners to reduce advertising have generally been met with resistance, but there have also been examples of success. Community efforts to promote smoke-free homes and cars to date have been sporadic and have had no significant impact on the percentages of smoking households statewide that have implemented either home or car smoking restrictions. NYTCP should implement mass media campaigns that promote a call to action for smokers to ban smoking in their homes.

Like the efforts of Community Partners, it is difficult to measure the impact of NYTCP Youth Partners' efforts to promote smoke-free movies. We recommend that Youth Partners continue to focus on advocating for policy change as apposed to broad-based community education, unless these efforts are accompanied by mass media messages specifically promoting smoke-free movie messages. Youth Partners have successfully advocated for reducing youth exposure to tobacco advertising in magazines. Preliminary analyses indicate that the percentage of schools that carry versions of certain magazines containing cigarette advertising has fallen markedly.

Despite the program's steady progress, cumbersome bureaucratic procedures within NYSDOH and state government have slowed the implementation of new initiatives, interrupted Community Partners' statewide mass media efforts, and interfered with the program's ability to coordinate activities across initiatives.

In summary, we make the following recommendations:

- Avoid unplanned gaps in media implementation to maximize coordination between NYSDOH and Community Partners and the Quitline.
  - Ensure that the Quitline can anticipate increases in call volume due to countermarketing efforts and staff the Quitline appropriately.
- Dedicate a sufficient amount of the newly available program resources to achieve 60% awareness of media messages among New Yorkers.
- Maximize the efficiency of mass media efforts to promote the Quitline by increasing the use of cost-effective media (e.g., print and radio).
- More actively promote smoke-free homes and cars through the use of mass media that includes a call to action to limit smoking in homes and cars.
  - Include a call to action to smokers in mass media messages to ban smoke in their home.
  - Dedicate a time of the year to concentrate efforts to promote smoke-free homes and cars (e.g., back to school time).
- Focus advocacy efforts to reduce cigarette advertising and promotions on large grocery stores and pharmacies that rely less on cigarette sales as a major source of revenue.
- Avoid gaps in Community Partner activities associated with annual contract renewals.

1. INTRODUCTION

The 2006 Independent Evaluation Report (IER) constitutes RTI International's third 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 previous IERs, we found that NYTCP's approach was solidly grounded in evidence-based strategies, that programmatic resources were invested appropriately, and that NYTCP established baseline indicators to monitor program progress in achieving its statutorily mandated objectives to change attitudes toward tobacco and to decrease smoking prevalence among youth and adults.

Since the 2005 IER, program funding has doubled, as recommended. The fiscal year 2006–2007 budget is $85 million, or roughly 90% of the Centers for Disease Control and Prevention's (CDC's) recommended funding minimum. This funding increase represents an impressive level of support for the program from the Governor and the state legislature and creates a number of opportunities for the program to build on its evidence-based approach. However, for the program to reach its full potential, it needs to expand its capacity quickly. At the time of this writing, additional funds have been encumbered for some initiatives, while other program components have not been able to expend additional dollars. Examples include the following:

- Cessation Centers—$1.38 million of additional funds available
- New York State Smokers' Quitline—$1.4 million of additional funds available
- Free nicotine replacement therapy for eligible Quitline callers—$4 million of additional funds available
- Reality Check Youth Partners—$0.6 million of additional funds available
- Tobacco countermarketing—$12.5 million of additional funds unavailable
- Clean Indoor Air Act (CIAA) enforcement—$2.2 million of additional funds unavailable
- Independent evaluation—$2.6 million of additional funds unavailable

Previous IERs suggest that rapid expansion of capacity will be challenging in light of historical delays in the procurement and spending processes. In addition, such a large increase in program activities will require the program to identify, hire, and train a significant number of new staff to develop and manage new and expanded initiatives. To date, no new staff positions have been filled.

The 2006 IER evaluates the following key interventions through the first quarter of 2006:

- countermarketing efforts,
- New York State Smokers' Quitline and Fax-to-Quit program,
- Cessation Centers, and
- selected community-based tobacco control initiatives.

Recommendations and Responses to the 2005 IER

In the 2005 IER, we concluded the following with respect to reaching programmatic goals:

- Smoking prevalence declined faster in New York than in the United States as a whole.
- Nonsmokers' exposure to secondhand smoke declined among youth and adults.
- Overall, compliance with the CIAA was high, except for in bars, where compliance was lower than in restaurants.
- The CIAA had no adverse economic impact on revenue for bars or full-service restaurants.
- Smokers' cigarette purchases from low- or untaxed sources reduced the public health effect of recent increases in cigarette excise taxes.
- Voluntary restrictions on smoking in homes and cars increased only slightly over time.

In the 2005 IER, we also noted that NYTCP had made significant progress responding to recommendations from the 2004 IER, which called for using evidence-based countermarketing messages that elicit strong emotional responses; support, reinforce, and extend programmatic activities and tobacco control policies; and reach more New Yorkers (at least 60%). Findings from the 2005 IER indicated that

- awareness of media messages increased;
- messages with greater emotional content elicited more favorable reactions from New Yorkers than previous, less emotional messages;
- awareness of media messages had a positive effect on smokers' knowledge of health risks, quit attempts, intentions to quit, and awareness of the New York State Smokers' Quitline;
- 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; and

- awareness of media messages fell short of the recommended 60%, likely because of limited resources.

Based on these findings, we recommended that the program increase its investment in effective media to consistently reach a minimum of 60% awareness of tobacco countermarketing messages among adults in New York.

To date, the program's response to these recommendations has been mixed. Although the program continued to choose ads with high emotional appeals, implementation was not consistent throughout the year, particularly for messages promoting smoking cessation. As described in Section 3.2, administrative barriers prevented the program from consistently implementing "high impact" ads (i.e., ads using emotional appeals or intense images) and cessation-focused messages throughout 2005.

In addition, we recommended the following programmatic changes:

- Double program funding to the CDC minimum recommended level of $95 million.
- Increase investment in evidence-based media to consistently reach a minimum of 60% awareness among New York adults.
- Increase resources for the New York State Smokers' Quitline to
  - accommodate increases in demand from increased use of effective media, and
  - provide additional nicotine replacement therapy starter kits.
- Increase cessation funding to address key programmatic gaps.
- Increase efforts to promote smoke-free homes and cars in households with smokers.
  - Ensure that smoke-free home and car interventions are effective, based on available evidence.

Report Organization

The remainder of this report is organized as follows. Chapter 2 compares trends in the prevalence of cigarette smoking in New York with national trends and presents other measures of tobacco use for New York, Chapters 3 through 6 evaluate the key interventions noted above, and Chapter 7 presents conclusions and recommends next steps for the program.

2. TOBACCO USE

To assess the progress that the New York Tobacco Control Program (NYTCP) is making in reducing tobacco use, we address the following evaluation questions:

- Are trends in the prevalence of adult smoking declining faster in New York than in the United States as a whole?
- Is monthly cigarette consumption among adult smokers declining over time?

To evaluate the program's progress, we rely on data from New York State and national surveys on tobacco use.

2.1 Trends in Tobacco Use

Investments in tobacco control have been shown to reduce the prevalence of youth and adult smoking, but there is a lag between funding; implementation of program activities; and resulting changes in tobacco-related attitudes, knowledge, and behavior. This lag exists because tobacco use is an addictive behavior and because building the necessary program infrastructure (e.g., talented, trained staff; strategic plans) and changing behavior take time.

By comparing trends in New York with trends in the United States as a whole, we can assess whether trends compare favorably with the average experience in the country 6 years after NYTCP began (in 2000). On average from 2002 through 2005, tobacco control expenditures in New York were on par with expenditures in the United States, with earlier years being somewhat below the national average and more recent years somewhat above average. Comparing trends in tobacco use in New York with trends in the rest of the country provides indirect evidence of whether New York's tobacco control efforts are having an effect above the average.

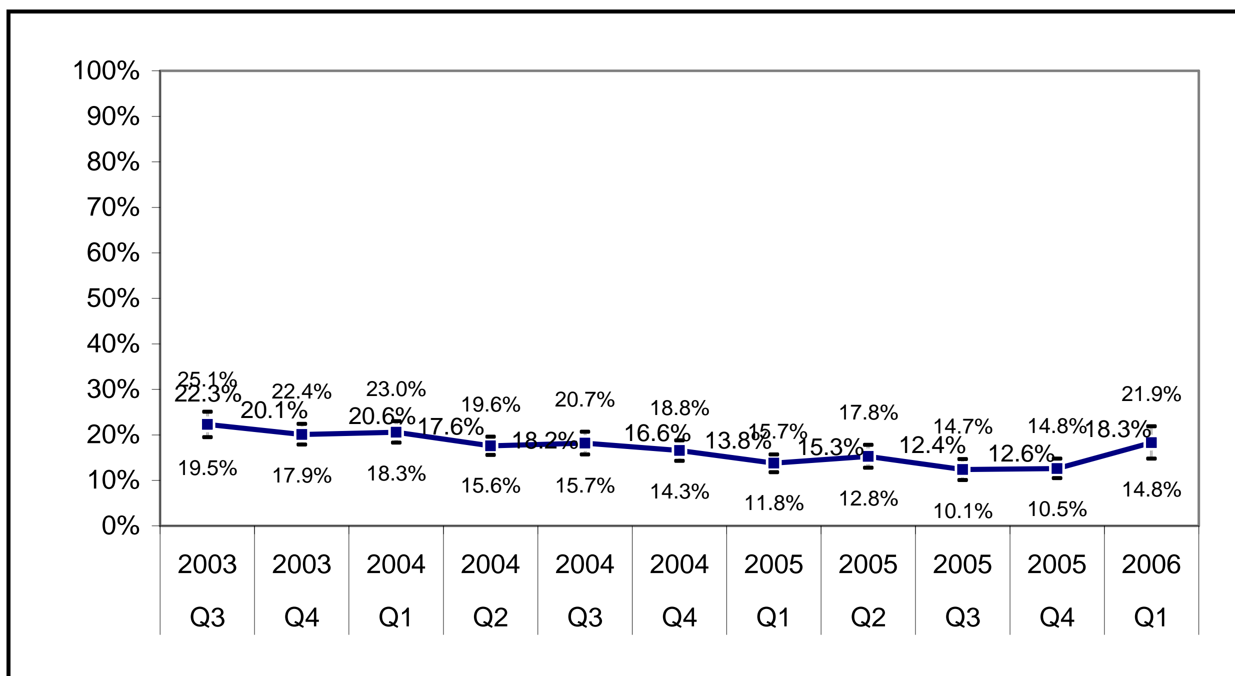
Using data from the annual National Health Interview Survey (NHIS), the New York Behavioral Risk Factor Surveillance System (BRFSS), and the New York Adult Tobacco Survey (ATS), we are able to compare trends in adult smoking between New York and the country as a whole. Exhibit 2-1 shows that, from 2001 to 2005, trends in the percentage of adult current smokers from the New York BRFSS tracked trends in the United States as a whole very closely.

The ATS shows a large decline in prevalence in 2005 (Exhibit 2-2); however, a comparison between trends in the quarterly data from the ATS and BRFSS throughout 2004 and 2005 indicate that the prevalence of smoking in the ATS diverged markedly from that of the BRFSS in the first quarter (Q1) of 2005. Throughout all four quarters of 2005, there were statistically significant differences in the prevalence of smoking between the ATS and BRFSS. This divergence appears to be due to a decreasing willingness of smokers to

Exhibit 2-1. Percentage of Adults Who Smoke Nationally and in New York, 2001–Q1 2006 [95% Confidence Interval]

Year	National Health Interview Survey	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]
2005	20.9 [20.3–21.5]	20.5 [19.3–21.7]	13.4 [12.3-14.5]
Q1 2006			18.3 [14.8–21.9]

Exhibit 2-2. Percentage of Adults Who Are Current Smokers, ATS Q3 2003-Q1 2006



participate in a tobacco survey. Despite this phenomenon, response rates for the ATS have remained very stable over time. To increase participation of smokers in the ATS, we conducted an experiment in the first quarter (Q1) of 2006 using incentives and an alternative introduction that mirrors the BRFSS (see Exhibit 2-3). The ATS shows a decline in the percentage of adults who currently smoke from 2003 (20.8%) to 2004 (18.1%) and then no change from 2004 to Q1 2006—similar to what the BRFSS indicates from 2004 to 2005. Overall, these data suggest that trends in smoking both nationally and in New York have remained stable from 2004 to 2005.

Exhibit 2-3. Analyzing and Interpreting Data from the 2005 Adult Tobacco Survey

The 2005 Adult Tobacco Survey (ATS) data are adversely affected by differential nonresponse by smoking status. New York adults who smoke were less likely to participate in the survey than New York adults who do not smoke. Therefore, the data cannot be used to accurately estimate the prevalence of smoking in New York in 2005. Because analyses that combine smokers and nonsmokers would be affected by the lower observed prevalence of smokers, we stratify analyses (examining smokers and nonsmokers separately) in this report to minimize any bias that might be introduced by the apparent underreporting of smoking.

The differential nonresponse was diagnosed when initial prevalence estimates based on the 2005 data were calculated and determined to be implausible when compared with smoking rates from the BRFSS. An experiment was initiated in the first quarter of 2006 to understand the cause of the data problems.

The experiment randomly assigned potential respondents into one of four conditions (i.e., four equal groups of phone numbers). The first condition followed the previous approach used for the ATS from Q3 2003 to Q4 2005. The second condition followed the previous approach but immediately offers potential respondents a $20 incentive. The third condition used an alternative survey introduction. This alternative mirrors the introduction for the Behavioral Risk Factor Surveillance System Survey—a general survey on health and health behaviors, including smoking. The fourth condition uses both the $20 incentive and the alternative introduction. The weighted prevalence of smoking for each of these conditions is shown in the following table:

Prevalence of Smoking by Experimental Condition, ATS Q1 2006

Q1 2006 ATS	Overall	Original Introduction	Original Introduction +$20 Incentive	BRFSS Introduction	BRFSS Introduction +$20 Incentive
Smoking Prevalence	18.3 [14.8–21.9]	17.0 [8.7–25.3]	19.0 [12.4-25.6]	19.8 [13.3-26.3]	17.6 [11.1–24.1]
N	1775	407	492	387	489

Based on the findings from this experiment, attempts were made to account for the differential nonresponse in the 2005 data. Unfortunately, these adjustments did not alter the implausible prevalence estimate based on the 2005 ATS data.

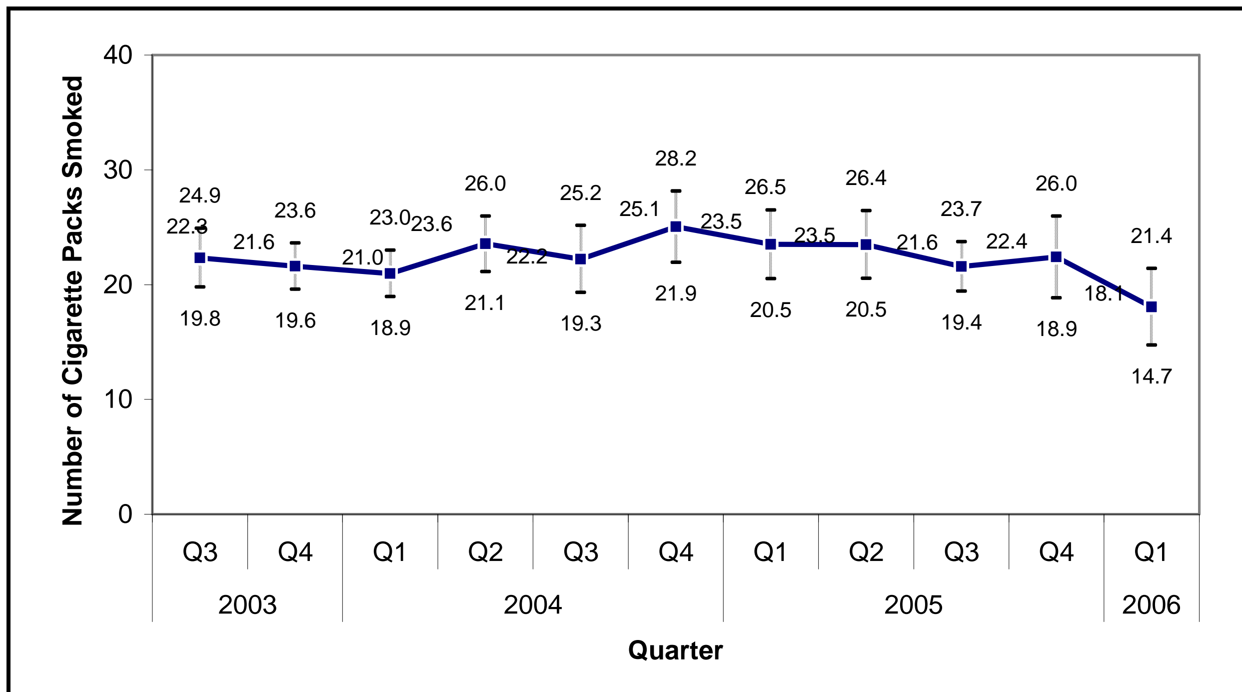
Prevalence estimates presented in this report are based on ATS data collected in the first quarter of 2006 (n = 1,775). The problem that caused the differential nonresponse in the 2005 data set seems to have been resolved and is not expected to affect the 2006 or future ATS data collection efforts.

In the remainder of this report, we present trends in program indicators separately for smokers and nonsmokers from Q3 2003 through Q1 2006. We believe that trends in program outcomes reported for smokers and nonsmokers separately will be largely unaffected by the apparent relative lack of participation by smokers in the ATS in 2005.

2.2 Cigarette Consumption

We calculated monthly cigarette consumption by multiplying the number of packs smoked per day by the number of days of smoking in the past 30 days. Exhibit 2-4 shows the average number of cigarette packs smoked by current smokers in the past 30 days. As shown, there has been no significant change in cigarette consumption from Q3 2003 to Q1 2006.

Exhibit 2-4. Average Number of Cigarette Packs Smoked by Current Smokers in the Past 30 Days, ATS Q3 2003–Q4 2005



2.3 Programmatic Implications

The data on smoking prevalence indicate that New York's average investment in tobacco control from 2002 through 2005 has yielded trends in smoking that are on par with the United States as a whole. In addition, among current smokers, there has been no change in monthly cigarette consumption from Q3 2003 to Q4 2005.

However, as we noted in the 2004 and 2005 IERs, NYTCP is founded on evidence-based strategies. The program has steadily increased its capacity to implement tobacco control

interventions. With the solid tobacco control infrastructure and a doubling of investments in tobacco control for fiscal year 2006–2007, the program is poised to have an impact on public health, provided bureaucratic obstacles do not further impede the program's ability to deliver effective interventions.

3. NEW YORK STATE TOBACCO COUNTERMARKETING

3.1 Overview of Tobacco Countermarketing in New York

Evidence shows that media campaigns can be an effective tool for reducing smoking prevalence when combined with other interventions (Hopkins et al., 2001; Farrelly, Niederdeppe, and Yarsevich, 2003; Farrelly, Crankshaw, and Davis, in press). In this chapter, we review the New York Tobacco Control Program's (NYTCP's) implementation of mass media efforts during 2005, focusing on choice of television ads, ad quality, and unplanned lapses in countermarketing efforts. Using data from the New York Adult Tobacco Survey (ATS), we examine how New York adults reacted to statewide tobacco countermarketing and how the choice of ad content, in terms of message themes and the use of emotional appeals and intense images, influenced these reactions. We also examine changes in awareness of and reactions to televised tobacco countermarketing over time and the extent to which awareness of tobacco countermarketing has affected key tobacco-related attitudinal and behavioral outcomes in New York. Finally, we make a series of recommendations for using recent increases in program funding to more quickly and effectively implement mass media efforts in the future.

3.2 Tobacco Countermarketing Efforts

At the outset of 2005, NYTCP's media plan called for continued airing of ads highlighting the dangers of secondhand smoke (SHS) and ads promoting smoking cessation, with additional ads aimed at decreasing the social acceptability of tobacco use. NYTCP's media plan includes a schedule for ads to be run by the New York State Department of Health (NYSDOH) and by Community Partnerships, which were provided with an additional $6 million to collaboratively run statewide media. With the 2005–2006 NYTCP budget fully encumbered, additional dollars were not available to achieve the recommended goal of reaching 60% of New Yorkers with mass media messages. Exhibit 3-1 summarizes ads that were aired statewide by the NYSDOH and NYTCP-funded Community Partnerships between Q2 2005 and Q1 2006 and were tracked in the ATS. This exhibit also includes our subjective qualitative assessment of each ad's impact based on the use of strong emotional appeals and/or intense images. Using high impact ads is important when attempting to provoke behavior change, such as encouraging smoking cessation or promoting home smoking restrictions in households with smokers. When the aim of the ads is to build support for policies (e.g., Clean Indoor Air Act [CIAA]) or illustrate the role of tobacco industry in promoting smoking, using high impact ads is not essential.

Exhibit 3-1. Statewide and Local Countermarketing Television Advertising in New York, Q2 2005–Q1 2006

Title	ATS Quarter	Message Theme	NYSDOH/ Community Partnership	Impact
Clinical	Q2, Q3 2005	SHS	NYSDOH	High
One Lung	Q2, Q3 2005	SHS	NYSDOH	High
It's Like They're Smoking	Q2, Q3 2005	SHS	NYSDOH	Low
Heather Crowe	Q2, Q3 2005	SHS	NYSDOH	High
Careful Series	Q3 2005	SHS	Partnership	Low
Drive	Q1 2006	SHS	NYSDOH	Low
Bigger Than Ever	Q3 2005	Social acceptability	Partnership	Low
Do You Smell Smoke? Series	Q3 2005	Social acceptability	Partnership	Low
They're Getting Smarter	Q1 2006	Social acceptability	Partnership	Low
Every Cigarette Does Damage	Q2 2005 (WNY)	Cessation	Partnership	High
Every Cigarette Does Damage	Q4 2005, Q1 2006 (Statewide)	Cessation	Partnership	High

Note: SHS = secondhand smoke; WNY = Western New York

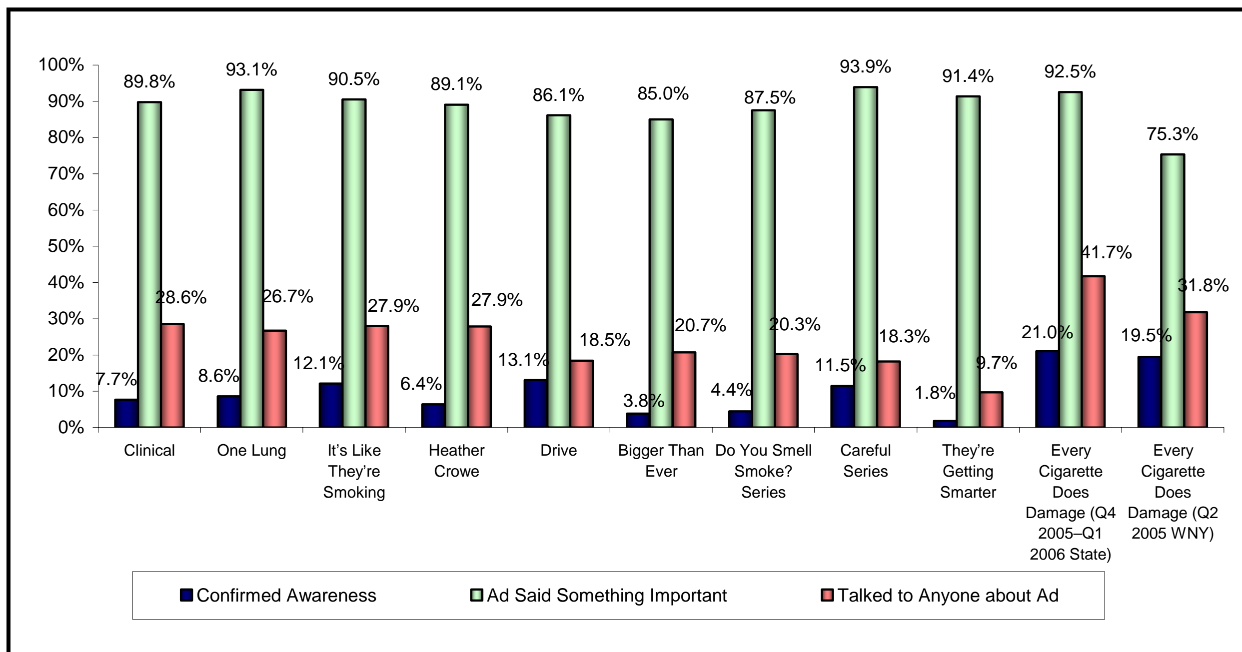
Overall, the program continued to air ads in support of the programmatic goal to eliminate exposure to SHS. NYSDOH aired a number of advertisements in Q2 and Q3 2005 that used strong emotional appeals to depict the physical and emotional toll of exposure to SHS, including "Clinical," "One Lung," and "Heather Crowe." NYTCP's Community Partnerships also aired the "Careful" series, produced by the Massachusetts Department of Public Health, featuring candid interviews with professionals who work with hazardous substances and are unaware of the similarity between the materials they work with and the chemicals found in SHS. Unlike the SHS-focused ads aired by NYSDOH, the Partnership-run "Careful" series made relatively less use of strong emotional appeals and intense images to depict the consequences of exposure to SHS and was geared toward general community education—especially of nonsmokers—to build support for SHS restrictions. Thus, no call to action, such as smoke-free homes, was included.

In 2005, Community Partnerships also aired a number of ads aimed at reducing the social acceptability of tobacco. These ads included "Breeding Ground," "Ethnic Targeting," and "Reverse Psychology" from the "Do You Smell Smoke?" series, produced by the California Department of Health Services. This series depicts tobacco industry executives gloating over their deceptive marketing practices to lure youth, young adults, and ethnic minorities into smoking. These ads use quotes taken from industry documents to convey messages of tobacco industry manipulation. However, we rated these ads as low impact based on their lack of emotional appeals and intense images, their use of the same actors across all ads,

and their low production quality. Given the objective of this series of ads, we do not believe that high impact ads are necessary.

Exhibit 3-2 shows data from the Q2 through Q2 2006 ATS on awareness of and reactions to the specific countermarketing ads described above. Awareness of specific SHS ads, including "Clinical," "One Lung," "It's Like They're Smoking," and "Drive" was low overall (13% or less). With the exception of "Drive," reactions to the ads were fairly strong, with 90% or more of adults who saw them indicating that the ads said something important. SHS ads, except for "Drive," also generated a significant amount of peer-to-peer communication among adults who saw them (27% or more). Awareness of the "Careful" series was also low (12%), but the ads appear to have resonated with New Yorkers, with 94% of adults who saw them indicating that the ads said something important. However, a relatively lower percentage (18%) of New Yorkers who saw the "Careful" series talked to someone else about the ads.

Exhibit 3-2. Percentage of Adults Who Reported Confirmed Awareness of and Reaction to Specific NYTCP Advertisements, ATS Q2 2005–Q1 2006



Note: WNY = Western New York

Overall, only 4% of New Yorkers reported seeing the "Do You Smell Smoke?" series of ads. Among adults who reported seeing the series, 88% indicated that the ads said something important to them, and 20% talked to someone else about the ads.

In the 2005 IER, we noted that the program made impressive strides toward using more intense, emotion-laden messages to promote smoking cessation. In particular, western New

Yorkers reported high levels of awareness and favorable reactions to the "Every Cigarette Does You Damage" campaign that aired locally in western New York in Q2 2005. This pattern continued in Q2 2005, when approximately 20% of western New Yorkers reported seeing this series of ads; of these, nearly one-third reported talking to someone about the ads. This series of ads also fared well statewide, when Community Partnerships aired the campaign during the final weeks of Q4 2005 and into Q1 2006. Statewide, 21% of New York adults reported seeing the ads during Q4 2005 and Q1 2006, and more than 40% of these adults reported talking to someone else about the ads. The Community Partnerships continued to air the "Every Cigarette Does You Damage" series in western New York during Q2 2005 and statewide during the final weeks of Q1 2006.

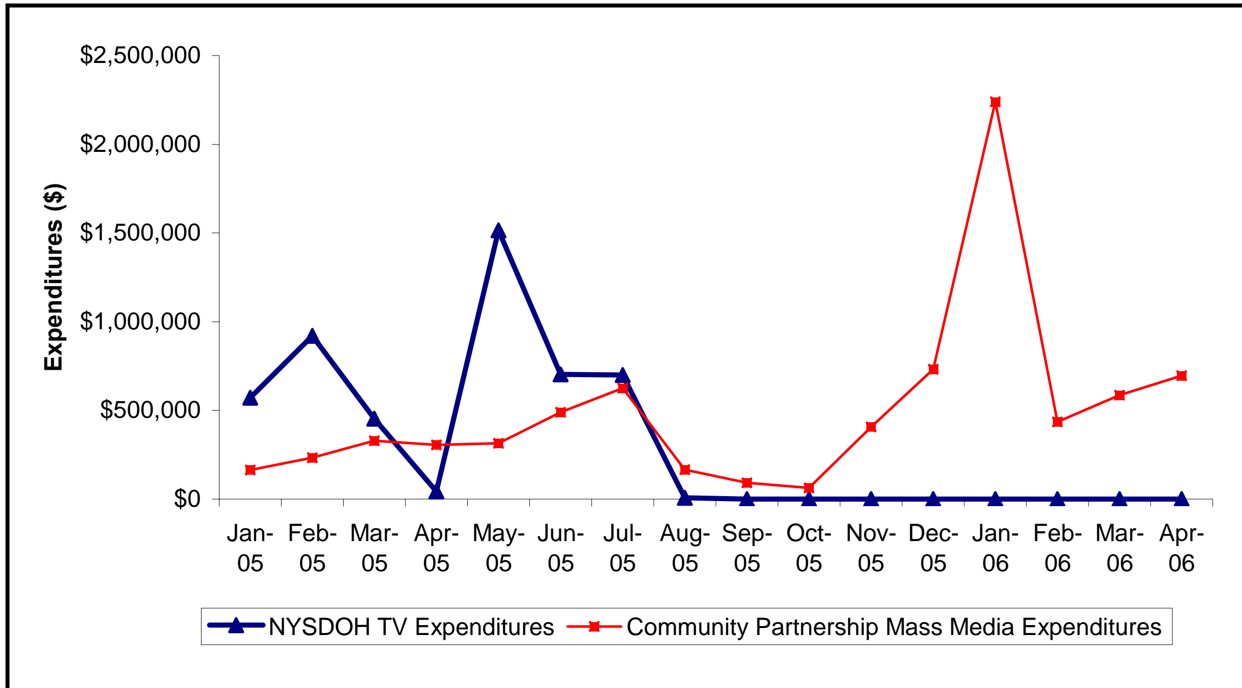
In spring 2005, NYTCP developed a media plan that called for high impact cessation-focused ads, such as "Tomorrow" and "Dead Twice," for Q3 and Q4 2005. The plan also called for NYSDOH, in coordination with Community Partnerships, to air nearly a dozen SHS and cessation-focused ads statewide to complement and support each other's media efforts. Unfortunately, the media plan and additional resources to support it were never approved. As a result, NYSDOH did not run television ads from August 2005 to late May 2006 and did not air cessation messages after Q1 2005. Exhibit 3-3 illustrates expenditures on paid media for Community Partnerships (all media) and NYSDOH television. Data on Community Partnership activities come from the Community Activity Tracking (CAT) system, 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.

Because of the long gaps in media programming, the program failed to implement a consistent countermarketing campaign during most of 2005; as described below, these failures adversely affected the countermarketing campaign's influence on key program outcomes.

3.3 Awareness of and Reactions to Tobacco Countermarketing in New York

Below, we present descriptive data from the ATS on awareness of and reactions to statewide countermarketing among New York adults through Q1 2006. Our analyses focus on how the choice of ad content, in terms of themes and use of emotional appeals and intense images, affects audience reactions to statewide tobacco countermarketing in New York. We begin by summarizing trends in overall awareness of and reactions to any televised advertising in New York. Next, we summarize differences in awareness of and reactions to cessation- and SHS-focused ads during the course of our evaluation, beginning

Exhibit 3-3. NYTCP Community Partnerships and NYSDOH Expenditures on Mass Media, CAT System, January 2005–April 2006



in Q3 2003. We then examine differences in awareness of and reactions to high impact and low impact tobacco countermarketing since Q3 2003.

3.3.1 Trends in Overall Awareness of and Reactions to Countermarketing

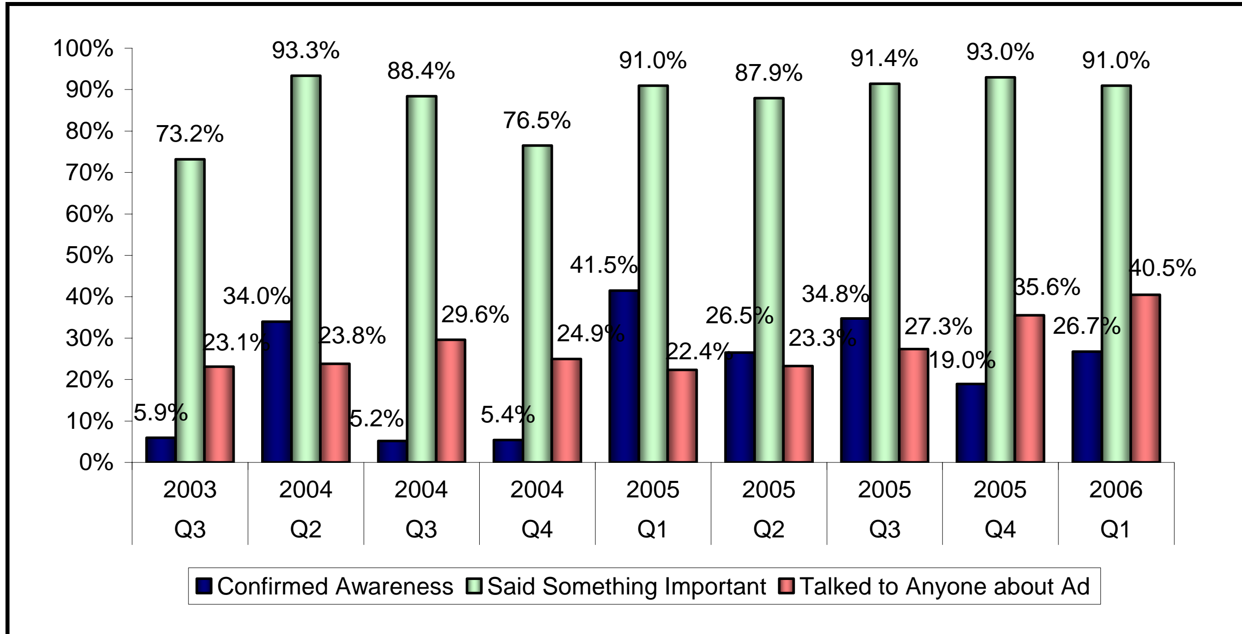
Exhibit 3-4 shows the historical schedule of countermarketing advertisements aired by NYSDOH and the Community Partnerships since Q3 2003. The analyses include overall awareness of and reactions to countermarketing in New York, covering all ads in the historical schedule.

Exhibit 3-5 shows overall awareness of and reactions to NYTCP-sponsored advertisements by quarter, beginning in Q3 2003. As noted in the 2005 IER, confirmed awareness of and reactions to media declined significantly in Q3 and Q4 2004 because of the absence of statewide advertising but rebounded sharply in Q1 2005 because of the success of the Pam Laffin series. (The series details emphysema victim Pam Laffin's struggle to survive the disease caused by years of smoking. She died at age 31.) This series of advertisements was aired statewide by NYTCP and Community Partnerships and contributed to an overall confirmed awareness rate of 41%. However, overall confirmed awareness decreased significantly to 27% in Q2 2005, increased to 35% in Q3 2005, dropped significantly again to 19% in Q4 2005, and increased again to 27% in Q1 2006 as different ads were run or as the dollar investment declined. The observed decline in awareness of media is not surprising

Exhibit 3-4. Historical Schedule of Countermarketing Advertisements Aired by NYSDOH and the Community Partnerships Since Q3 2003

Title	2003						2004												2005												2006				
	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M
Cessation Ads																																			
Cigarette Pack																																			
Pam Laffin's Kids																																			
Quit Yet																																			
Quitting Takes Practice																																			
Bob Quits																																			
Every Cigarette Does Damage																																			
I Need You																																			
Judy Dying																																			
Pam Laffin (Abuse)																																			
Pam Laffin (Krystell)																																			
Pam Laffin (Last Goodbye)																																			
Quitting Is Hard																																			
SHS Ads																																			
Baby Seat																																			
Bartender																																			
Clinical																																			
Drive																																			
Front Porch																																			
Heather Crowe																																			
It's Like They're Smoking																																			
Little Girl																																			
Never Smoke																																			
One Lung																																			
Outside the Bar																																			
Sign of the Times																																			
Waitress																																			
Careful Series																																			
CIAA Testimonials in Mall																																			
Clean Indoor Air Testimonials for Business																																			
Paul Decker																																			
Smoke Free New York																																			
Social Acceptability Ads																																			
Bigger Than Ever																																			
Breeding Ground																																			
Do You Smell Smoke? Series																																			
Drive Along																																			
They're Getting Smarter																																			

Exhibit 3-5. Percentage of Adults Who Reported Confirmed Awareness of and Reaction to NYTCP Media Campaign Advertisements (Statewide and Local), ATS Q3 2003–Q1 2006

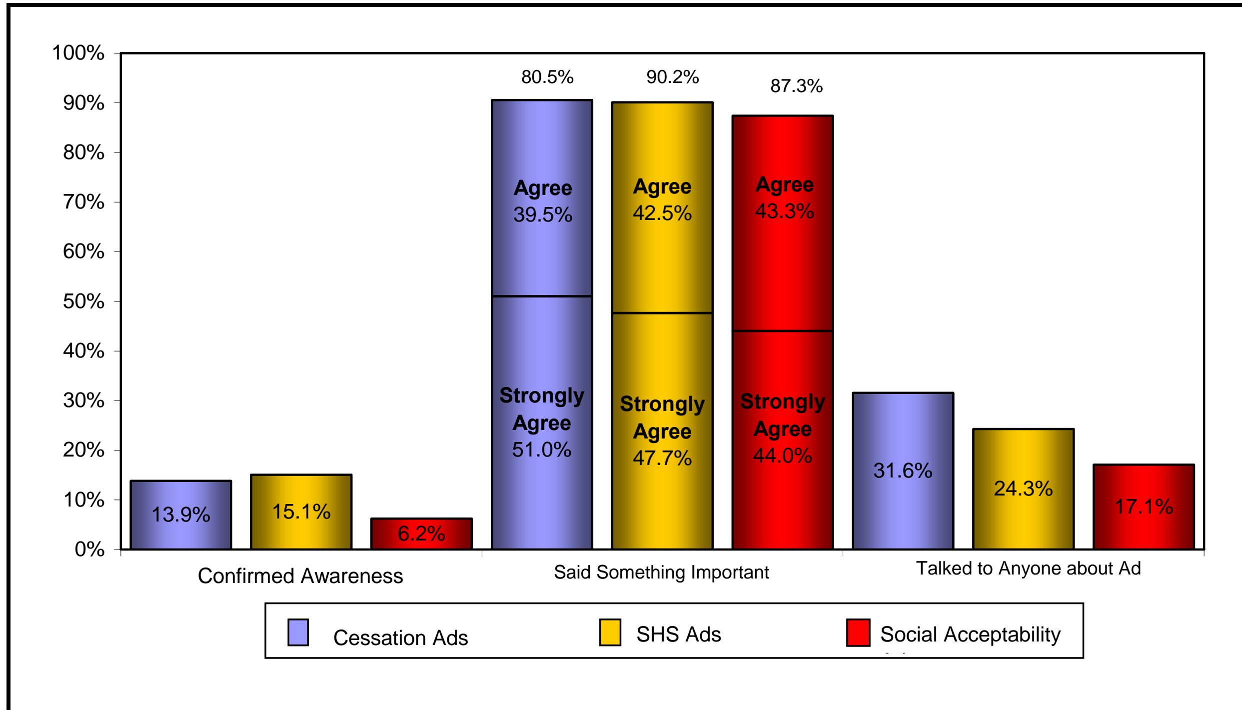


given the general decrease in statewide media activity, particularly for ads promoting smoking cessation. It is, however, encouraging that reactions to statewide media remained strong throughout 2005 and early 2006, which may be due to NYSDOH's use of strong SHS messages in Q2 and Q3 and to the statewide airing of the "Every Cigarette Does Damage" series in Q4 2005 and Q1 2006 by Community Partnerships. Use of the "Every Cigarette Does Damage" series also contributed to a significant increase in peer-to-peer communication about countermarketing messages in Q4 2005 and Q1 2006.

3.3.2 Awareness of and Reactions to Countermarketing by Message Theme and Impact

Exhibit 3-6 shows overall confirmed awareness of and reactions to countermarketing by message theme for all ads between Q3 2003 and Q1 2006. Confirmed awareness of SHS- and cessation-focused ads was significantly higher than awareness of ads that focused on the social acceptability of tobacco use. Reactions to SHS and cessation-focused ads have been favorable during the course of the ATS. However, reactions to ads that focused on reducing the social acceptability of tobacco were relatively less favorable. Although awareness may be significantly higher for SHS and cessation-focused ads than for social acceptability ads, it is important to consider the dollar investment in media purchases for each type of message strategy and goal area. NYTCP has devoted a greater amount of resources to SHS and cessation-focused ads.

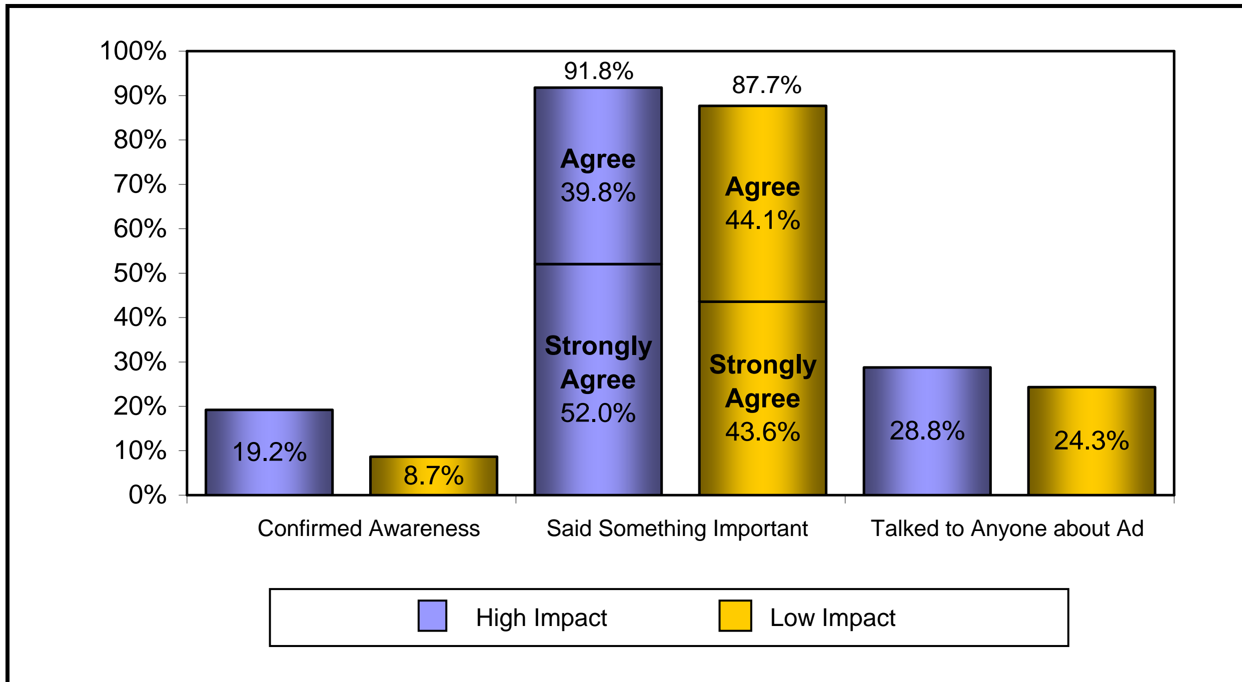
Exhibit 3-6. Percentage of Adults Who Reported Confirmed Awareness of and Reaction to Cessation, SHS, and Social Acceptability Advertisements (NYSDOH and Community Partnerships), ATS Q3 2003–Q1 2006 Combined



In Exhibit 3-7, we present awareness of and reactions to high and low impact ads, using data from all waves of the ATS. Overall, awareness and reactions were significantly higher for high impact ads. High impact ads generated more favorable audience reactions, with 52% of New Yorkers who saw the high impact ads strongly agreeing that the ads "said something important" compared with 44% of New Yorkers who saw the low impact ads.

Although ads that use intense images and high emotional appeals may generate more favorable audience reactions compared with low impact ads, it is important to consider these differences within the context under which different types of ads are used. For example, the use of intense images and emotional appeals may be more appropriate for cessation-focused messages that often portray the deadly consequences of smoking (e.g., lung cancer, death) and the extreme emotional toll taken on families that lose loved ones due to smoking-related illnesses. SHS messages, on the other hand, are often used for a more diverse set of objectives, including promoting smoke-free homes and cars, building public support for clean indoor air regulations, and providing general information about the dangers of SHS. These objectives often require more basic public education messages that are not well-suited to the use of high emotional appeals or intense images—characteristics that determine our subjective ratings of high and low impact.

Exhibit 3-7. Percentage of Adults Who Reported Confirmed Awareness of and Reaction to NYTCP High and Low Impact Advertisements (Statewide and Local), ATS Q3 2003–Q1 2006 Combined



Since 2003, a significantly lower proportion of SHS-focused ads have been rated as "high impact" based on the use of emotional appeals and intense images. As noted above, this can be attributed to the more nuanced set of objectives for which SHS ads in New York have been used. In general, SHS ads in New York have used three primary message strategies, each corresponding to a distinct SHS-focused objective: (1) ads that promote public support for clean indoor air regulations; (2) ads that encourage New York adults, and parents in particular, to not smoke in the presence of children; and (3) ads that educate the public about the health effects and general dangers of exposure to SHS.

Exhibit 3-8 lists SHS ads aired by NYSDOH and Community Partnerships since Q3 2003, by message strategy. Not surprisingly, almost all ads that promote clean indoor air regulations were rated as low impact based on their lack of emotional appeals and intense images. However, this does not necessarily indicate poor choice of ads because these objectives often require more of a public education approach, which is not suited to the use of high impact messages. SHS ads that highlight the health dangers of SHS used high emotional appeals and intense images more often because health effects messages, like those emphasized in cessation-focused ads, are more conducive to the use of high impact messages. As with ads focusing on promoting cessation, ads aimed at encouraging adults to not smoke in the presence of children should be high impact.

Exhibit 3-8. NYSDOH and Community Partnership SHS Advertisements Aired in New York, by Message Strategy

Title	Strategy	NYSDOH/ Partnership	Impact
Sign of the Times	CIAA promotion	NYSDOH	Low
Clean Indoor Air Testimonials	CIAA promotion	Partnership	Low
CIAA Testimonials in Mall	CIAA promotion	Partnership	Low
Smoke Free New York	CIAA promotion	Partnership	Low
Outside the Bar	CIAA promotion	NYSDOH	Low
Bartender	CIAA promotion—health effects	NYSDOH	Low
Waitress	CIAA promotion—health effects	NYSDOH	Low
It's Like They're Smoking	Danger to kids	NYSDOH	Low
Baby Seat	Danger to kids	NYSDOH	High
Front Porch	Danger to kids—smoke outside	NYSDOH	Low
Never Smoke	Danger to kids—smoke outside	NYSDOH	Low
Little Girl	Danger to kids—don't smoke in their presence	NYSDOH	Low
Clinical	General health effects	NYSDOH	High
One Lung	General health effects	NYSDOH	High
Heather Crowe	General health effects	NYSDOH	High
Careful Series	General health effects	Partnership	Low
Paul Decker	General health effects	Partnership	High
Drive	General health effects	Partnership	Low

3.4 Effect of Countermarketing on Tobacco-Related Outcomes

In the 2005 IER, we reported that adults' awareness of NYTCP-sponsored advertisements was associated with awareness of the New York State Smokers' Quitline, intentions to quit, and quit attempts. To reexamine whether the relationship between tobacco countermarketing and these outcomes continued throughout 2005, we again estimated a series of logistic regression models of these outcomes as a function of exposure to countermarketing. Our models include data from the Q3 2003 through Q1 2006 ATS and include control variables for age, gender, race/ethnicity, education, income, cigarette consumption, and a time trend.

We assessed the association between different types of ads and awareness of the New York State Smokers' Quitline by estimating a series of logistic regression models that related smokers' awareness of the Quitline to recall of SHS and cessation ads. Our models showed that both SHS and cessation ads have a strong impact on awareness of the Quitline among adult smokers (odds ratio [OR] = 1.7, $p < 0.006$ for SHS ads; OR = 1.5, $p < 0.02$ for

cessation ads). We also found that recall of high impact ads was positively associated with smokers' awareness of the Quitline (OR = 1.8, $p < 0.001$), while recall of low impact ads was not (OR = 1.3, $p = 0.3$).

Although we did not find any evidence that the SHS ads aired during 2005 significantly promoted home smoking bans, we did find that smokers who recalled SHS ads were more likely to recognize the harmful effects of exposure to SHS. Specifically, we found that smokers' recall of SHS ads was associated with greater beliefs that SHS can cause heart disease (OR = 1.4, $p < 0.04$) and lung cancer (OR = 1.6, $p < 0.009$). We also found that recall of cessation ads (OR = 1.3, $p < 0.01$) was strongly associated with support for the Clean Indoor Air Act.

For other outcomes, however, the effects of the program's media efforts have been significantly diminished. Most notably, recall of cessation ads is no longer associated with an increased odds of intending to quit smoking (OR = 1.24, $p < 0.3$) or with trying to quit (OR = 1.22, $p < 0.2$). These findings would suggest that a sustained focus on high impact cessation messages by NYSDOH and the Community Partnerships may be needed to renew the program's effects on cessation-related outcomes.

3.5 Programmatic Implications

In the 2005 IER, we noted that NYTCP had made noticeable progress toward addressing critiques of mass media efforts in the previous year by airing "high emotion" ads and achieving significantly higher levels of media awareness, particularly in western New York where recall of NYTCP-sponsored ads reached the recommended level of 60%. In 2005, the program used high impact ads, such as "Clinical," "One Lung," and "Heather Crowe," to highlight the dangers of SHS. The program's Community Partnerships also continued to air the cessation-focused "Every Cigarette Does Damage" series locally in western New York during Q2 2005 and statewide during Q4 2005 and Q1 2006. All of these ads employ messages that are either emotion-laden or use intense or graphic images.

We also showed that the choice of ad content—in terms of message themes and the use of intense, emotion-laden advertisements—is an important determinant in producing higher rates of awareness and favorable audience reactions. Ads that we rated as high impact based on their use of strong emotional appeals and/or intense images were significantly more likely to be recalled, and New Yorkers more often strongly agreed that high impact ads said something important. Taken together, these findings highlight the importance of choosing appropriate message themes with high-quality content and message delivery. The findings also reiterate the importance of airing ads with sufficient weight, or dollar investment, to achieve acceptable levels of awareness.

Unfortunately, NYSDOH failed to consistently implement countermarketing messages. They did not air any messages from August 2005 to late May 2006—an unplanned gap far longer

than the 6-month unplanned gap that occurred in 2004. As a result of this unplanned gap in media implementation, NYTCP was far from achieving the 2005 IER recommendation to consistently air a sufficient number of countermarketing messages to achieve 60% awareness statewide. This gap was due to the fact that the media plan developed in spring 2005 was never approved, and NYTCP requests for additional mass media resources went unanswered. This large gap in mass media adversely affected the countermarketing campaign's influence on key program outcomes.

We also showed that, while awareness of SHS messages was associated with beliefs about the health risks of exposure to SHS, awareness is still not associated with increased adoption of smoke-free home or car policies. Although this may still be a consequence of unplanned gaps in media efforts, it may also reflect the diverse nature of objectives and resulting message strategies associated with SHS ads, which include promoting public support for clean indoor air regulations and educating the public about the dangers of SHS. The breadth of the messages strategies used in SHS ads aired in New York may make it difficult to detect an overall effect of SHS ads on more specific objectives such as the adoption of smoke-free homes and cars. However, it is worth noting that among the core set of ads that do encourage adults to not smoke in the presence of children (see Exhibit 3-8), only two ads ("Front Porch" and "Never Smoke") explicitly call for smokers to smoke outside.

In summary, our findings indicate that ad content and adherence to the program's media plan and budget are significant factors in determining New Yorkers' reactions to ads and the overall effectiveness of tobacco countermarketing. Furthermore, previous evaluation recommendations were not addressed as well in 2005 as they were in the previous year. With recent increases in funding for NYTCP, it will be essential to deploy these resources quickly and effectively to meet program objectives. Additional funding also represents an excellent opportunity to fully meet recommendations set forth in this and previous IERs. Many of our suggestions for improvement are similar to previous recommendations. Moving forward, we recommend the following to improve the effectiveness of NYTCP's media efforts:

- Continue to air countermarketing advertisements that use high impact (i.e., emotional, intense) messages to promote smoking cessation and reduced exposure to SHS.
- Avoid unplanned gaps in media implementation to maximize coordination between NYSDOH and Community Partners.
- Improve the contract renewal process for Community Partnerships, or even implement multiyear media contracts, to reduce significant swings in Partner media activity.
- Ensure that Community Partnerships consistently cultivate relationships with media outlets to fully utilize opportunities for donated advertising time.

- Invest in media sufficient to achieve 60% statewide.
- Consider choosing additional SHS-focused messages that have been shown to be effective in encouraging adoption of smoke-free homes and cars through themes such as "Take it Outside."

4. NEW YORK STATE SMOKERS' QUITLINE AND FAX-TO-QUIT PROGRAM

4.1 Overview of the New York State Smokers' Quitline and Fax-to-Quit Program

The New York Tobacco Control Program (NYTCP) promotes smoking cessation by encouraging the use of evidence-based strategies (i.e., providing a Quitline, reducing the cost of nicotine replacement therapy [NRT]) and promoting physician assistance in quitting through Cessation Centers and the Fax-to-Quit program. The New York State Smokers' Quitline began in 2000 and has steadily increased the number and types of services it provides. The Quitline serves many purposes for the program: (1) a service for quitting; (2) a clearinghouse of information on smoking cessation; (3) a call to action for mass media messages that are tagged with the Quitline; and (4) a way to encourage health care providers to screen their patients for tobacco use, knowing they can refer them to the Quitline. Quitline callers may choose to

- speak to a Quitline specialist (Monday through Friday from 9:00 a.m. to 9:00 p.m. and Saturday and Sunday from 9:00 a.m. to 1:00 p.m.),
- leave a voicemail message to receive general information about cessation in the mail,
- leave a voicemail message to receive a callback (this option is available when the Quitline specialists are not available),
- listen to a taped message from the message library, or
- listen to the tip of the day.

The Quitline also serves as a clearinghouse for cessation information. A number of resources and materials are available through the Quitline, including fact sheets on a variety of topics (e.g., tips on quitting and staying quit, Medicaid coverage of smoking cessation, information on secondhand smoke [SHS]), smoking cessation guides ("Break Loose"), Fax-to-Quit referral pads for health care providers, educational posters, and other resources. The Cessation Centers and Community Partnerships routinely order materials through the Quitline.

Annual funding for the Quitline increased from $500,000 to $1.1 million in 2005. With increased funding, the Quitline has increased the types of services it provides and expanded the number of smokers it can serve.

Quitline services were enhanced in December 2004, with the introduction of free 2-week NRT starter kits to eligible Quitline callers. Callers who request counseling with a specialist complete a brief intake interview that determines how the caller heard about the Quitline,

assesses the caller's tobacco use and intentions to quit, and screens the caller for eligibility for the starter kit. All clients receiving NRT should receive a call from a Quitline specialist approximately 2 weeks from their initial call to verify that they received the NRT, screen for possible side effects, provide additional support for their quit process, and ask some questions about the quality of Quitline services. In 2005, the Quitline also enhanced its services for Medicaid and uninsured clients by offering up to 6 weeks of NRT and up to four scheduled proactive callbacks.

In the past year, the Quitline has established relationships with several New York State health plans that offer more extensive cessation services for their members. Once a Quitline client is identified as a member of a partner health plan, the client is given a description of that plan's cessation services. If willing, the client is directed to the plan's cessation services. This process can increase the client's access to cessation services and conserve Quitline resources.

One way that smokers can be referred to the Quitline is by a faxed referral from their health care provider (Fax-to-Quit). A Quitline specialist will then contact the patient to offer help with the quit process, including providing NRT to eligible clients. Providers are sent a report from the Quitline describing the services the patient received and the patient's progress.

In this chapter, we evaluate NYTCP's progress toward the following objectives related to the New York State Smokers' Quitline and Fax-to-Quit program:

- Increase the percentage 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.

In addition to these objectives, the Quitline had several specific objectives for the period from June 1, 2005, to May 31, 2006:

- Provide telephone assistance to 50,000 callers per year.
- Increase the number of Quitline clients referred by a health care provider through Fax-to-Quit to 1,000 to 1,500 annually.
- Provide proactive telephone counseling services to 5,000 mainly uninsured and Medicaid-insured tobacco users per year.
- Enroll at least 30,000 eligible smokers per year into a program that delivers free nicotine medications.
- Achieve a 12-month quit rate of at least 20% among smokers who receive telephone counseling and 30% among those who receive NRT.

In this chapter, we describe the programmatic activities conducted in support of these objectives and evaluate the impact of these activities on awareness of and calls to the Quitline and use of Fax-to-Quit. Specifically, we describe the

- efforts to promote the Quitline by Cessation Centers and Community Partnerships using data from the Community Activity Tracking (CAT) system,
- types of services New Yorkers request when calling the Quitline,
- most common sources of referral to the Quitline,
- trends in awareness of the Quitline and how mass media efforts influence calls to the Quitline, and
- use and impact of distributing free NRT via the Quitline.

We conclude by discussing progress toward programmatic goals and making recommendations for future Quitline efforts.

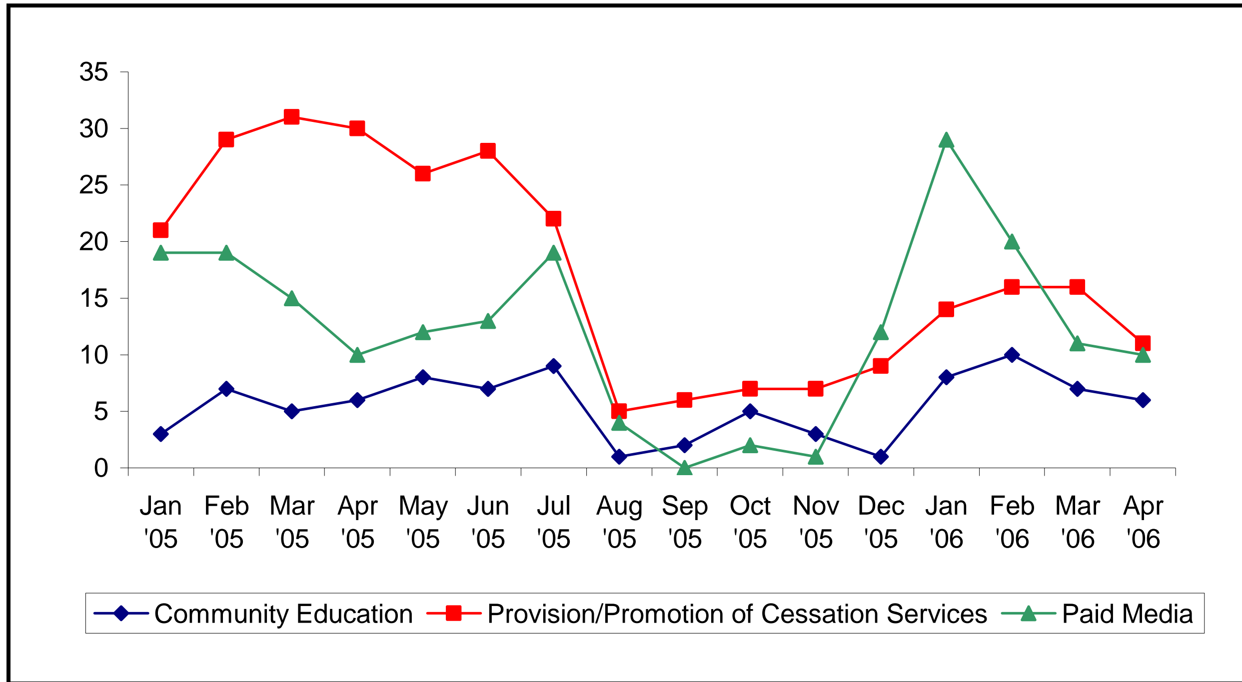
4.2 Efforts to Promote the Quitline and Fax-to-Quit Program

One of NYTCP's primary methods for promoting the Quitline is through television advertisements aired by the New York State Department of Health (NYSDOH) and funded Community Partnerships. (Advertisements aired in recent years are described in Chapter 3.) As discussed below, television advertising spiked in early 2006. As noted in Chapter 3, these advertisements aired by the Community Partnerships focused on cessation, using high impact advertisements from the "Every Cigarette Does You Damage" campaign. These advertisements were the first to mention NRT availability through the Quitline. The Community Partners that were most active in promoting the Quitline and Fax-to-Quit program are the Cessation Centers and the Community Partnerships. They reported conducting the following types of activities in the CAT system:

- Provided Quitline information and giveaways at health care provider trainings and presentations.
  - Information and tools included Quitline referral cards, prescription-to-quit pads, posters, brochures, flyers, and palm cards.
  - Giveaways included stress balls, fans, magnets, pens, tote bags, tent cards, napkins, and cost calculators.
- Conducted mass media efforts promoting the Quitline (e.g., television, radio, newspaper, Pennysavers, billboards).
- Provided Quitline information to cessation groups.

Exhibit 4-1 shows Cessation Center and Community Partnership strategies to promote the Quitline by month. Strategies are organized into three categories: paid media (e.g., television and radio ads, billboards), promotion of cessation services, and community

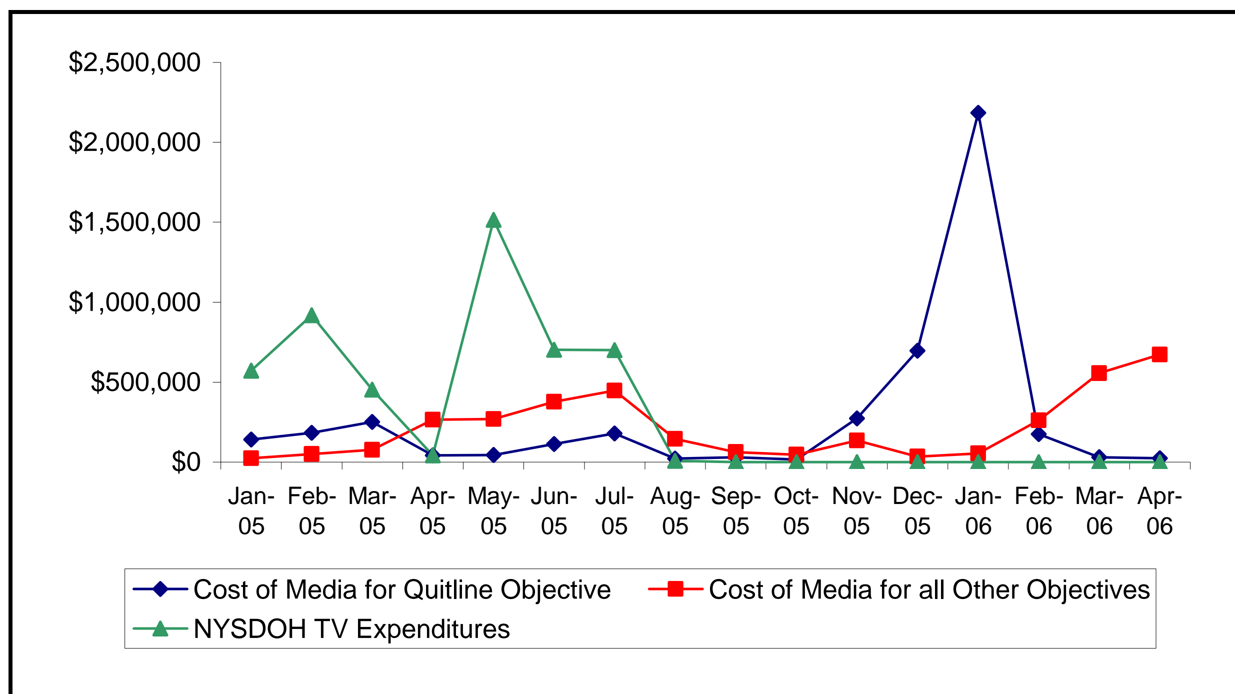
Exhibit 4-1. Activities by Community Partnerships and Cessation Centers to Promote the Quitline, CAT System, January 2005–April 2006



education. Promotion of cessation services includes a variety of activities to disseminate information to health care providers, businesses, or organizations about available cessation services (e.g., Quitline information, cessation resource guides). Community education involves providing information or materials to community members about the Quitline through community events, such as the Great American Smoke-Out, and staffing booths at health fairs and community events.

The number of active strategies in any month is a reasonable proxy for the level of effort dedicated statewide to a given programmatic objective. Active strategies are those strategies reported in a Community Partner's work plan for which the Partner reported some activity in monthly progress reports. However, in the case of paid media, the number of active strategies primarily reflects the efforts involved in planning and implementing paid media, not the financial resources dedicated to the objective. To more accurately depict the resources dedicated to paid media related to Quitline promotion, we plot the expenditures on television ads for the Quitline and all other program objectives in Exhibit 4-2. Community Partnerships spent more than $2 million on television advertising in January 2006 alone to capitalize on New Year's resolutions and $4.4 million from January 2005 to April 2006. This figure also illustrates total NYSDOH expenditures on television advertising over the same period. In our analysis, we examined the impact of statewide media on the number of calls

Exhibit 4-2. Mass Media Expenditures by NYSDOH and NYTCP Community Partnerships for Quitline and Other Objectives, CAT System, January 2005–April 2006



to the Quitline. Given the large spike in expenditures in January, we also examined the extent to which the Quitline was able to adequately handle the associated increase in call volume.

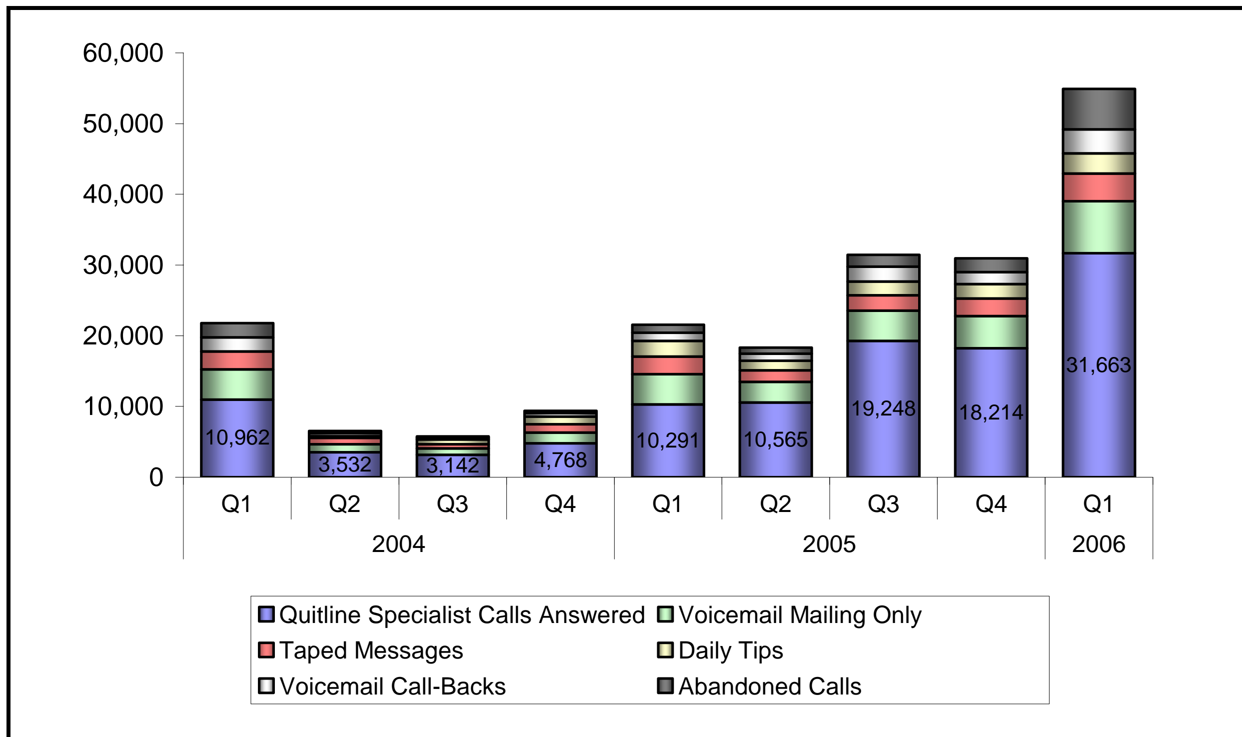
As shown in Exhibit 4-1, the provision and promotion of cessation services (e.g., distributing promotional materials for the Quitline) was the most commonly reported activity, followed by paid media and community education (e.g., organizing community events). Exhibits 4-1 and 4-2 show a lull in reported Community Partnership activities between August 2005 and October 2005, associated with delays in modifying Community Partnership' contracts. These contracts were scheduled to be modified by August 1 (start of the fiscal year), but many of them were not fully executed until October.

Some of the challenges Partners reported in the CAT system for promoting the Quitline included the high cost of advertising, slow Quitline response during times of high call volume, and disruptions in the statewide media plan (described in Chapter 3). Some of the factors that Community Partnerships cited as contributing to their perceived success in promoting the Quitline included the availability of resources from the Quitline, the willingness of health care provider organizations to support and endorse Quitline efforts, a strong relationship with media buyers, and successful collaboration with Community Partnerships on media buys.

4.3 Use of Quitline Services

Total calls to the Quitline increased markedly in 2005 and early 2006 (Exhibit 4-3). Call volume increased by approximately 100,000 calls from Q2 2004–Q1 2005 (46,000 calls) to Q2 2005–Q1 2006 (146,000 calls). The spike in incoming calls in Q1 2006 corresponds to a large mass media effort by NYTCP-funded Community Partners (primarily Community Partnerships), the use of high impact ads, New Year's resolutions to quit, and earned media. This large increase is a significant accomplishment. Of the approximately 146,000 callers, 45,000 (31%) spoke with a Quitline specialist. Based on studies of the effectiveness of telephone counseling, we estimate that 63% will make a serious quit attempt within 3 months of calling the Quitline and 12% will remain quit for 12 months. This translates to 28,350 smokers who made a serious quit attempt and 5,355 smokers who quit and remain quit for 12 months.

Exhibit 4-3. Quitline Calls by Type of Service Requested, Quitline Call Tracking System, Q1 2004–Q1 2006



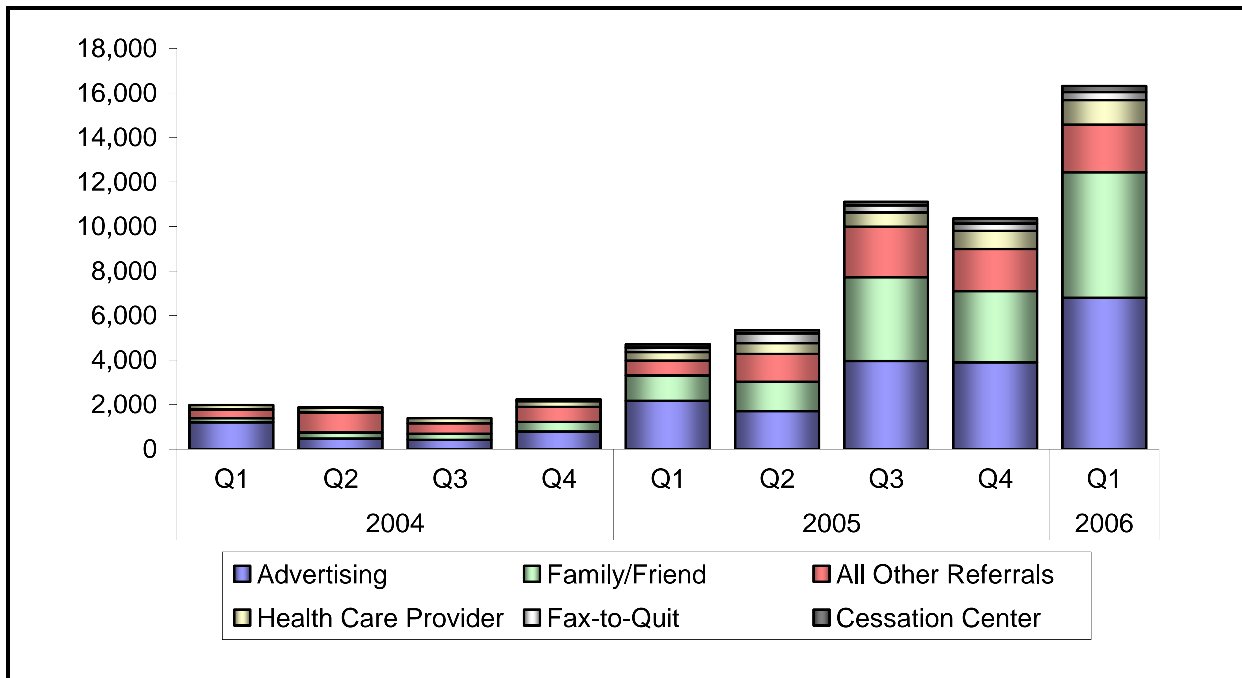
This exhibit also illustrates the types of services callers requested. The most common service requested was counseling with a Quitline specialist, followed by voicemail messages requesting a mailing with general information about smoking cessation. Six percent to 15% of callers who asked to speak to a Quitline specialist hung up before talking to a specialist, with higher percentages of abandoned calls associated with longer wait times during peaks

in call volume. In Q1 2006, when there was a one-time spike in calls to the Quitline, 15% of callers who requested to speak to a Quitline specialist hung up before they spoke to a specialist. Monthly data indicate that 20% of callers who asked to speak to a specialist abandoned their calls in January, 14% in February, and 10% in March. In addition, Community Partners expressed frustration with the Quitline's slow response to requests during periods of peak activity. Because many smokers traditionally attempt to quit in conjunction with a New Year's resolution, it is particularly important to carefully calibrate media buys with Quitline capacity to avoid overtaxing the Quitline and frustrating callers who are unable to obtain services.

4.4 How New Yorkers Heard about the Quitline

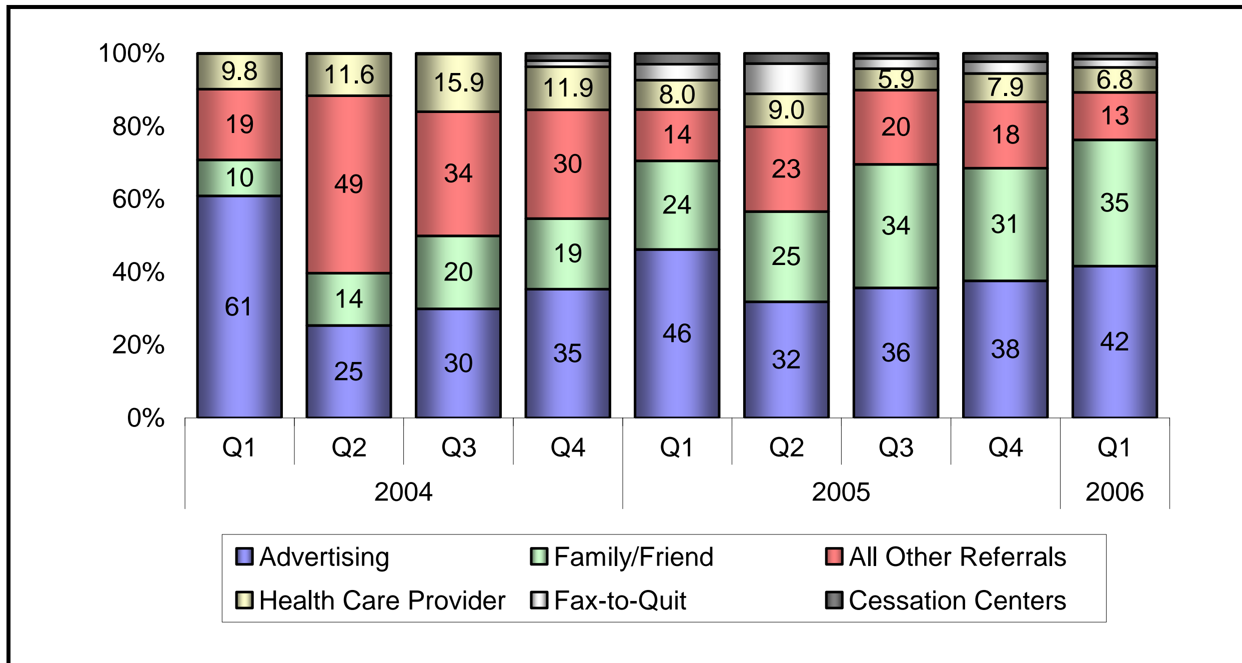
To learn how callers heard about the Quitline, we examined data from the intake interviews with callers asking to speak to a Quitline specialist for counseling. Advertising and referrals from family and friends were the most commonly cited sources of referral to the Quitline (Exhibit 4-4). As the program has expanded its capacity with the introduction of Fax-to-Quit and Cessation Centers, the referral sources have become more diverse. The number of callers who said they heard about the Quitline from health care providers, Fax-to-Quit (another measure of health care provider referral), and Cessation Centers has increased in the past 2 years. For example, the number of callers citing health care provider referral more than tripled from Q1 2005 (346) to Q1 2006 (1,109).

Exhibit 4-4. Total Number of New York State Smokers' Quitline Calls Requesting Counseling by Source of Referral, Quitline Call Tracking System Intake Interview, Q1 2004–Q1 2006



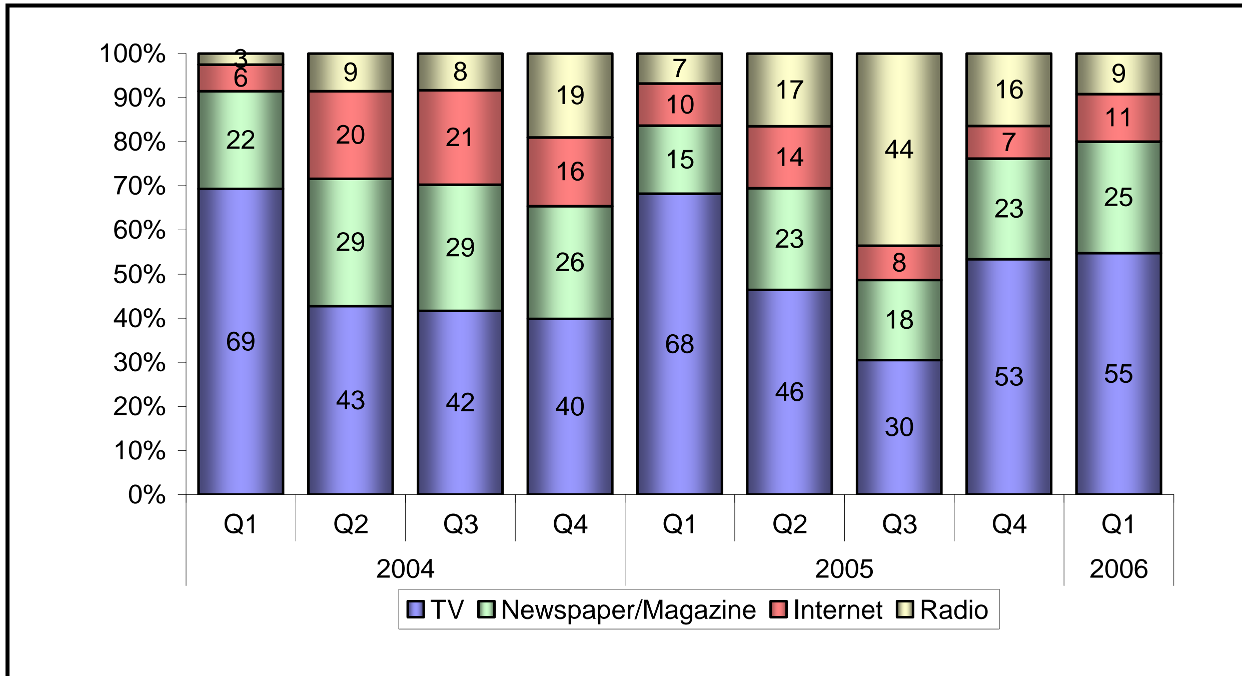
The percentage of callers requesting counseling who indicated they heard about the Quitline through family and/or friends also increased from Q1 2005 (10%) to Q1 2006 (35%) (Exhibit 4-5). It is difficult to determine which factors caused this trend, but the data in Chapter 3 indicate that an increasing percentage of people who saw television ads talked to others about these ads. It is possible that improvements in mass media efforts are encouraging friends and family to refer smokers to the Quitline.

Exhibit 4-5. Percentage of New York State Smokers' Quitline Calls Requesting Counseling by Source of Referral, Quitline Call Tracking System Intake Interview, Q1 2004–Q1 2006



Because advertising is consistently the most important influence on calls to the Quitline, we examined the types of advertising mentioned by callers more closely (Exhibit 4-6). These data indicate that, on average from Q1 2004 to Q1 2006, approximately half of callers mentioned television, one-fifth mentioned radio and newspapers, and one-tenth indicated the Internet. (However, these proportions vary considerably from quarter to quarter.) These data suggest that radio, newspapers, and the Internet are viable media for NYTCP and Community Partners to use to promote the Quitline, especially for Community Partners in media markets where the cost of television advertising is relatively high (e.g., New York City).

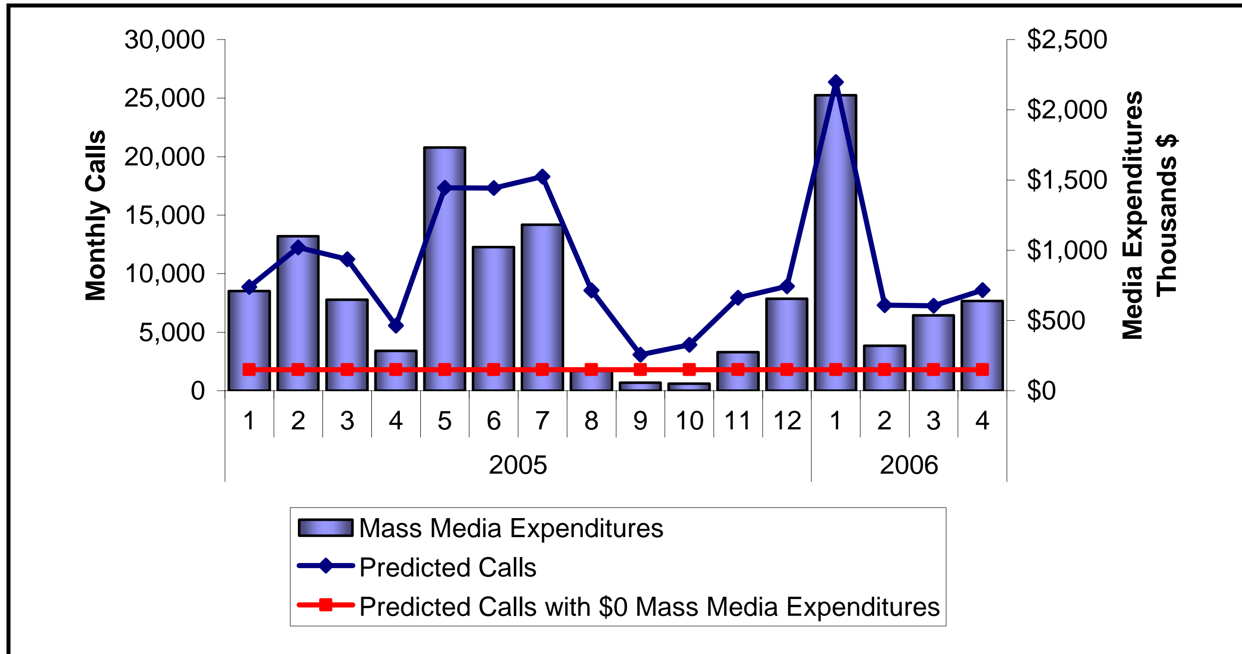
Exhibit 4-6. Distribution of Advertising Referrals, Quitline Call Tracking System Intake Interview, Q1 2004–Q1 2006



4.5 Effect of Mass Media on Quitline Call Volume

To quantify the relationship between mass media efforts and calls to the Quitline, we conducted an analysis to complement the analyses in Chapter 3, showing that smokers' awareness of NYTCP-sponsored television ads is positively correlated with awareness of the Quitline. The current analysis relates expenditures on mass media by Community Partnerships and NYSDOH (see Exhibit 4-2) to calls to the Quitline. For this analysis, we regressed monthly county-level call volume on total expenditures for paid television advertising and expenditures by Community Partners on radio advertisements (regardless of the main message of the ad) and newspaper advertisements promoting the Quitline from January 2005 through April 2006. This regression shows a strong positive relationship between calls to the Quitline and expenditures for television ($p < 0.001$), radio ($p < 0.001$), and newspaper advertising ($p < 0.001$). This analysis suggests that, during this period, call volume was five times higher than it would have been in the absence of paid media (Exhibit 4-7). This analysis indicates that, for every 10% increase in expenditures on television advertisements, call volume increases by 5.3%. Similarly, a 10% increase in expenditures on radio and newspaper advertisements leads to a 1.9% and 1.1% increase in call volume, respectively.

Exhibit 4-7. Effect of NYTCP Community Partners and NYSDOH Mass Media on Quitline Call Volume, January 2005–April 2006



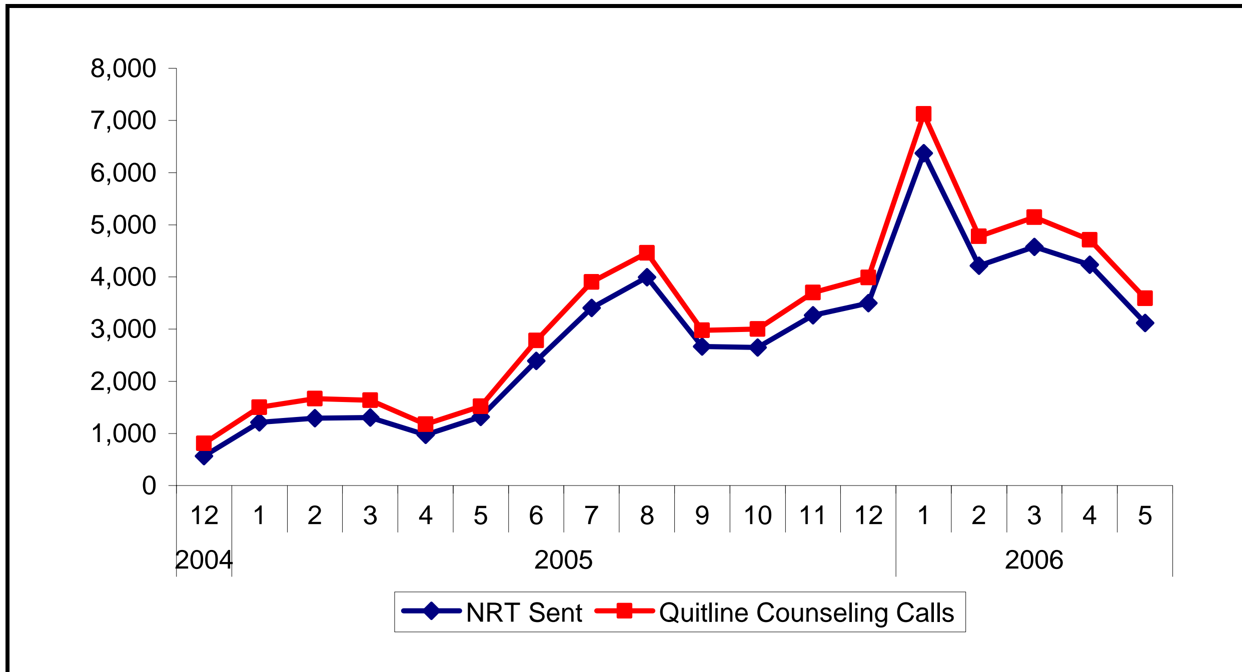
4.6 Use and Impact of Nicotine Replacement Therapy via Quitline

Evidence indicates that provision of NRT increases the odds of quitting by 50% to 100% (Silagy et al., 2006) and increases the odds of remaining quit (Hughes et al., 2003; Miller et al., 2005; Bauer et al., 2006; Cummings et al., 2006, in press). Beginning in December 2004, the Quitline distributed free NRT starter kits to eligible smokers. The distribution of free NRT starter kits has increased significantly as the volume of calls to the Quitline has increased. In addition, among callers who completed intake interviews, on average, 87% were sent NRT from December 2004 to May 2006, indicating a high level of interest in NRT (Exhibit 4-8). Based on the literature, we would expect that those who receive NRT through the Quitline will be more likely to quit and remain quit compared with earlier periods when NRT was not available through the Quitline.

4.7 Programmatic Implications

NYTCP and the New York Smokers' Quitline accomplished a significant achievement by accommodating a marked increase in call volume (approximately 100,000 additional calls) in 2005 and early 2006. This increase translated into an estimated 28,350 serious quit attempts and 5,355 successful quits and was largely driven by mass media efforts and the availability of free NRT. This increase was also possible because of the Quitline's increased capacity. Our data demonstrate that nearly 9 out of 10 callers who spoke with a Quitline specialist received the NRT starter kit and the number of smokers who received NRT

Exhibit 4-8. Number of Calls with Quitline Specialists and Number of Callers Receiving Nicotine Replacement Therapy Starter Kits, Quitline Call Tracking System, December 2004–May 2006



increased markedly along with total call volume in the past year. In addition, the Quitline continues to serve as a clearinghouse of information and is increasingly used by health care providers who can refer patients to the Quitline through fax referrals.

However, during spikes in call volume associated with significant mass media efforts, as many as 20% of callers requesting to speak with a Quitline specialist abandoned their call. Therefore, although the Quitline managed an impressive increase in call volume in 2005, greater attention needs to be paid to minimizing the number of callers who hang up while waiting for a Quitline specialist. The number of callers who hang up could be minimized by more actively coordinating mass media efforts with the Quitline so that the Quitline can staff appropriately and/or distributing mass media more equally throughout the year to minimize large spikes in Quitline call volume. Unfortunately, disruptions in mass media efforts have been common in recent years, which makes such explicit coordination challenging. While mass media is the dominant driver of calls to the Quitline, the number of callers who were referred to the Quitline by health care providers, Fax-to-Quit, and Cessation Centers has increased in the past year as NYTCP has placed greater emphasis on promoting treatment for tobacco dependence in health care settings.

We demonstrated a strong link between NYSDOH and Community Partners' paid media efforts (i.e., television, radio and newspaper advertising) and calls to the Quitline. Because

the cost of television advertising is high, especially in large media markets, further attention should be paid to the relative cost-effectiveness of television, radio, and newspaper advertising to more efficiently invest mass media resources.

5. CESSATION CENTERS

5.1 Overview of Cessation Centers

The New York Tobacco Control Program (NYTCP) established contracts with 19 Cessation Centers in late 2004 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.

Systematic reviews of interventions that prompt health care providers to identify tobacco users and provide advice to quit (reminder systems) and educate providers to counsel their patients to quit (provider education) have concluded that these approaches are effective. When combined with patient education (e.g., self-help materials), these approaches have been found to increase the percentage of providers who advise patients to quit and increase the percentage of patients who quit (Hopkins et al., 2001).

5.2 Cessation Center Efforts

The NYTCP Strategic Plan includes the following objective related to Cessation Centers:

- 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.

To understand Cessation Centers' efforts to promote cessation and to evaluate their progress, we relied on three data sources: (1) the Community Activity Tracking (CAT) system, (2) semistructured qualitative interviews with 8 of the 19 Cessation Centers, and (3) interviews with health care provider organizations and surveys of health care providers. CAT provides quantitative process data on the types and intensity of efforts to promote cessation and qualitative feedback on barriers and successes encountered by Cessation Centers. The qualitative interviews were designed to complement the CAT data by eliciting more detailed descriptions of how Cessation Centers approach their work, the challenges they face, and their opinions about best practices for conducting this initiative. The health care provider organization interviews provide a statewide assessment of hospitals and medical practices by capturing information on policies and practices central to the goals of the Cessation Centers. The hospital interviews were conducted primarily between December 2004 and April 2005, and the medical practice interviews were conducted between March and August 2005. We interviewed staff who were most knowledgeable about tobacco screening and assessment systems at their organization. We also conducted surveys of health care providers in hospital and medical practices to assess providers' awareness of cessation services and their practices regarding screening and treatment of tobacco dependence.

To date, the Cessation Centers have identified about 187 health care provider organizations, including hospitals (N = 74), medical practices (N = 65), substance abuse and mental health treatment organizations (N = 30), college health services (N = 7), and other organizations (N = 11) they are working with to promote screening systems. In addition, Cessation Centers are working with different departments within hospitals and medical practices. Interviews with Cessation Centers indicate that they primarily work with hospitals or large health care provider organizations with which they have a relationship. Most Cessation Centers felt that targeting hospitals and large health care provider organizations would provide the most useful results and measurable success because of their size and reach and felt that establishing relationships with these organizations would facilitate future cooperation from affiliated clinics and medical practices.

The Cessation Centers' work falls into one of three categories: advocating for policy change with health care provider organizations (also known as gaining "administrative commitment"), which includes establishing goals and timelines for integrating changes and policies and guidelines; providing training to health care providers; and providing technical assistance to provider organizations. The latter includes such activities as assessing needs and monitoring progress related to implementing and communicating organizational policies and practices on an ongoing basis, providing guidance on updating tobacco use screening systems and forms, and distributing educational materials and nicotine replacement therapy (NRT).

CAT data show that the Cessation Centers have steadily increased their capacity to promote cessation in health care settings. The number of Cessation Center collaborations with provider organizations (Exhibit 5-1) and the number of activities (Exhibit 5-2) have both increased over time. Specifically, 262 trainings with 10,179 individuals were conducted between January 2005 and April 2006. Exhibit 5-2 illustrates an expected sequence of activities—once the Cessation Centers have obtained buy-in, their activities progressively focus on providing training and technical assistance. Unlike other Community Partners that experienced a lull in activities from August through October 2005, the Cessation Centers had no such slowdown because Cessation Centers are a staffed model, with little expenditures for other nonpersonnel services. Contractors always maintain staff during noncontract periods, but they do not have the ability to cover costs for other nonpersonnel services while the contracts are not active.

Exhibit 5-1. Number of Active Collaborations between Cessation Centers and Health Care Organizations, CAT System, January 2005–April 2006

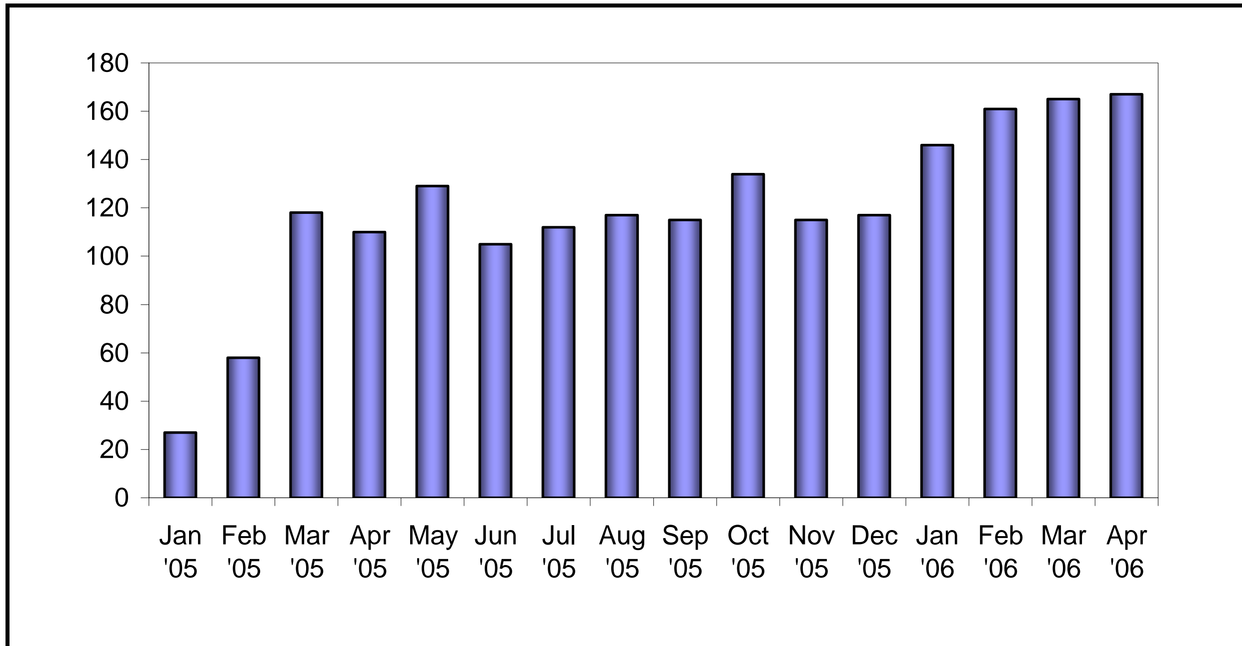
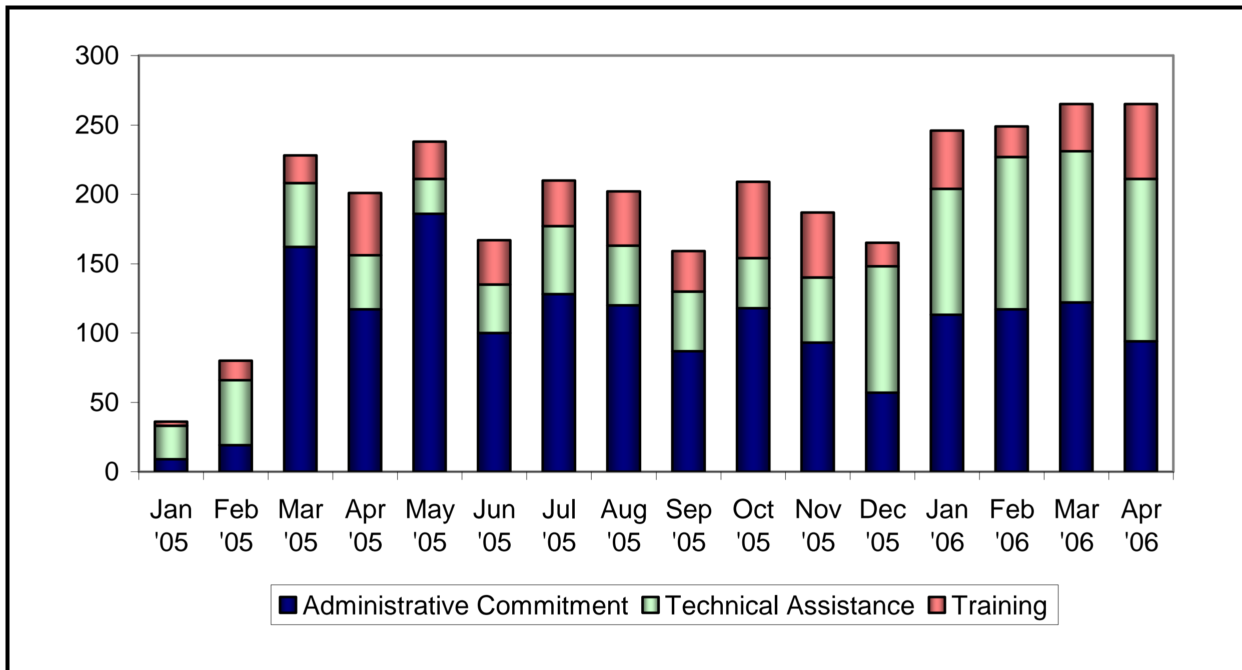


Exhibit 5-2. Number and Type of Activities Conducted by Cessation Centers, CAT System, January 2005–April 2006



5.3 Opportunities and Challenges in Promoting Cessation in Health Care Provider Organizations

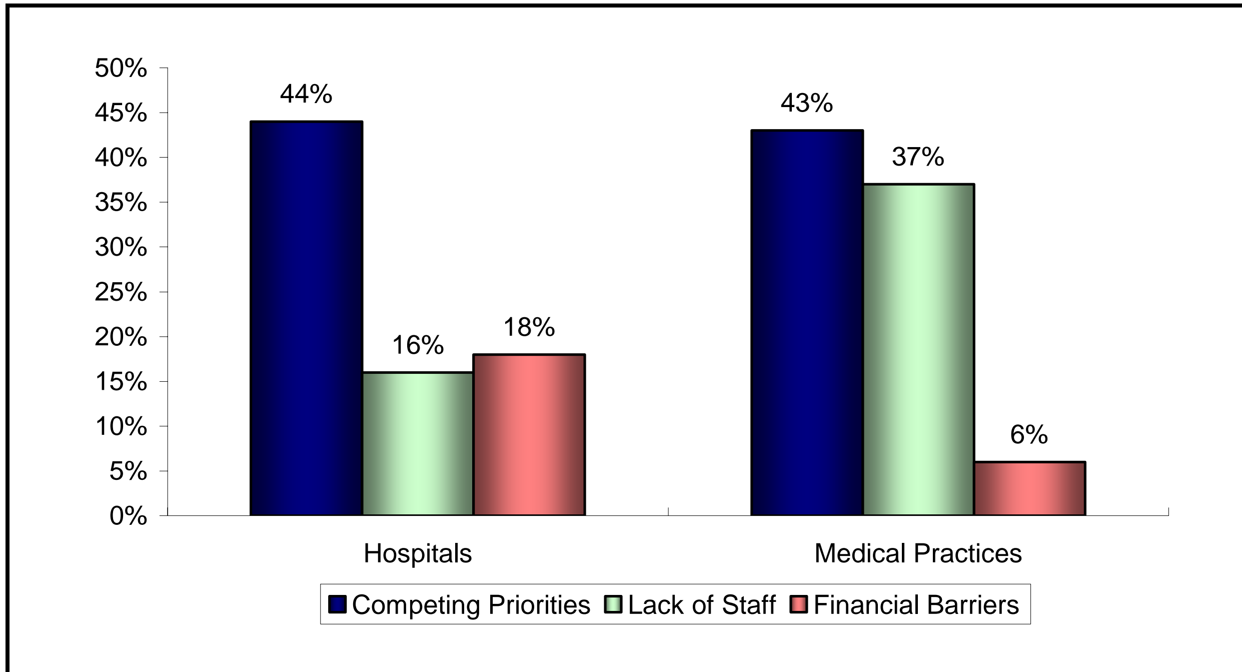
From the Cessation Center interviews, we identified common challenges Cessation Centers faced in approaching health care provider organizations, including overcoming the perception among health care provider organization staff that they are already addressing tobacco use adequately and do not need to add more policies or procedures, competing with typical health care provider day-to-day demands, and scheduling meetings or trainings. Several Partners indicated that it is not unusual for providers to cancel a meeting or training because of an unanticipated event, such as a medical emergency.

Health care provider organization administrators[1] were asked about barriers they faced in changing policies and practices for tobacco screening and brief counseling. Interview data confirm the Cessation Centers' impressions of barriers (Exhibit 5-3). "Competing priorities" was the barrier cited most frequently by hospitals (44%) and medical practices (43%). Hospitals cited lack of staff (16%) and financial barriers (18%) as the second and third most important barriers, whereas medical practices cited lack of staff almost as frequently as competing priorities (37%), followed by financial barriers (6%).

A common strategy for gaining cooperation from organizations and overcoming resistance is to provide mini-grants or stipends to facilitate systems-level changes. In exchange for receiving the mini-grants, the organizations agree to establish systems to track the percentage of smokers who are screened for tobacco use and offered advice to quit. The Cessation Centers can then assess the extent to which providers are asking patients (new and existing) about their tobacco use and providing brief counseling. To the extent that there are gaps in the percentage of patients who get screened and counseled, the Cessation Centers can use these data to motivate provider organizations to continue to improve their tobacco use identification and treatment. Another common strategy is to conduct "academic detailing"—an approach similar to that used by pharmaceutical companies to market their products—which involves site visits, training, technical assistance, and relationship building.

[1]Among hospitals, approximately half of respondents were either (1) senior or executive management (e.g., Directors of Nursing, Vice President [VP] of Medical Affairs, Chief of General Medicine, Cancer Center Director, VP of Health) or (2) department or service directors/managers/coordinators (e.g., cardiopulmonary directors, coordinator for disease management, clinical education coordinator, director of smoking cessation). The remaining half comprised (1) senior management in the areas of quality improvement, risk management, clinical integration, and education; (2) other high-level management (e.g., Assistant Director of Nursing, Nursing Care Coordinator, Associate VP of Patient Care Services, VP of Community Services); and (3) education (e.g., nurse educator) and individual clinicians (nurses and physicians). Respondents for medical practices also varied, from medical directors to nurse managers to practice managers/administrators/office managers to individual clinicians or other individuals (e.g., patient services representative, health educator, smoking cessation coordinator).

Exhibit 5-3. Health Care Provider Organizations' Most Important Barriers to Systems-Level Change, 2005 Health Care Organization Interview



The Cessation Centers also motivate health care provider organizations to change policies and procedures by showing providers that implementing tobacco use identification systems and treatment protocol are aligned with the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) guidelines and core measures. JCAHO sets quality standards for health care organizations, including core measures focusing on adult smoking cessation advice or counseling.

With respect to provider training, Cessation Centers identified the following best practices:

- Provide training on-site.
- Provide incentives, such as lunch, because many providers are used to pharmaceutical representatives bringing lunch or breakfast to meetings or trainings.
- Coordinate training with already scheduled staff meetings or Grand Rounds to ensure a "captive audience."
- Offer continuing education credits for providers to encourage attendance at trainings.

In addition to advocating for policy change and conducting provider trainings, the Cessation Centers distribute educational materials. They reported that NYTCP is their primary source of educational and promotional materials (i.e., the Quit Kit), although they also ordered provider and patient materials from other sources, including the Centers for Disease Control

and Prevention, American Cancer Society, American Lung Association, and the University of Wisconsin Center for Tobacco Research. Several Cessation Centers reported developing their own educational or promotional materials for providers, including materials to train providers on implementing a screening system. Currently, Cessation Centers report most frequently using outside materials.

All but one Cessation Center reported ordering materials from the New York State Department of Health (NYSDOH). The materials included a health care provider Quit Kit, which contains Fax-to-Quit program information and office materials; posters; cessation guides; Quitline handout cards; branded giveaways; and various information sheets, including quitting facts, NRT overview, and information about Medicaid support for NRT.

5.4 Measuring Health Care Provider and Provider Organization Efforts to Promote Cessation

To evaluate the impact that NYTCP, Cessation Centers, and other funded partners have on health care providers' and provider organizations' efforts to promote cessation in health care settings, we relied on two primary data sources: New Yorkers' self-reports of their health care provider's behavior from the Adult Tobacco Survey (ATS) and surveys of health care providers and provider organizations. However, because the Cessation Centers have only been active for approximately 18 months, we do not expect to see evidence of a population-wide impact of their efforts.

The ATS provides a population-level estimate of smokers who have visited a health care provider in the last year. Because the Cessation Centers have focused primarily on effecting change in hospital settings and because the ATS does not specify whether smokers encountered a health care provider in a hospital or in a medical practice, the ATS may not be a very sensitive measure of provider behavior change in hospital settings. However, at this stage of the evaluation, the ATS is our only source of statewide data to measure changes over time. Because the Cessation Centers are working with 74 out of the approximately 240 hospital systems statewide, they have the potential to significantly affect provider behavior in these settings. They are also working with 65 medical practices, although the universe of medical practices is significantly larger, with more than 1,500 practices statewide.

The questions in the ATS, health care provider survey, and provider organization interviews are informed by the 2000 PHS Guideline for Treating Tobacco Use and Dependence. This guideline 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 them quit).
- Arrange (schedule follow-up contact for those willing to make a quit attempt).

In the ATS, all respondents are asked if they have visited a doctor, nurse, or other health professional. Current smokers are also asked the following:

- During the past 12 months, did any doctor, nurse, or health professional ask if you smoke?
- In the past 12 months, has a doctor, nurse, or other health professional advised you to quit smoking?
- 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 that 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?

Based on these questions, we constructed four indicators measuring provider efforts to promote cessation. Provider assistance for quitting is based on a positive response to any of the first five questions listed above (e.g., prescribing or recommending nicotine patches, calling a quit line).

Data from the ATS show that the proportion of adult smokers who visited a health care provider in the past year has remained stable in the past 2 years, at roughly two-thirds (Exhibit 5-4). The percentage of smokers who were asked if they use tobacco and were advised to quit when they visited a health care provider has also remained constant. Among smokers who visited a health care provider in the past year, approximately 9 out of 10 were asked if they smoked, and three-quarters of smokers were advised to quit (Exhibits 5-5 and 5-6). The percentage of smokers who report receiving assistance with quitting from their health care provider increased substantially from Q3 2003 (38%) to Q1 2006 (58%) (Exhibit 5-7).

Exhibit 5-4. Percentage of Adult Smokers Who Visited a Doctor, Nurse, or Other Health Professional in the Past 12 Months, ATS Q3 2003–Q1 2006

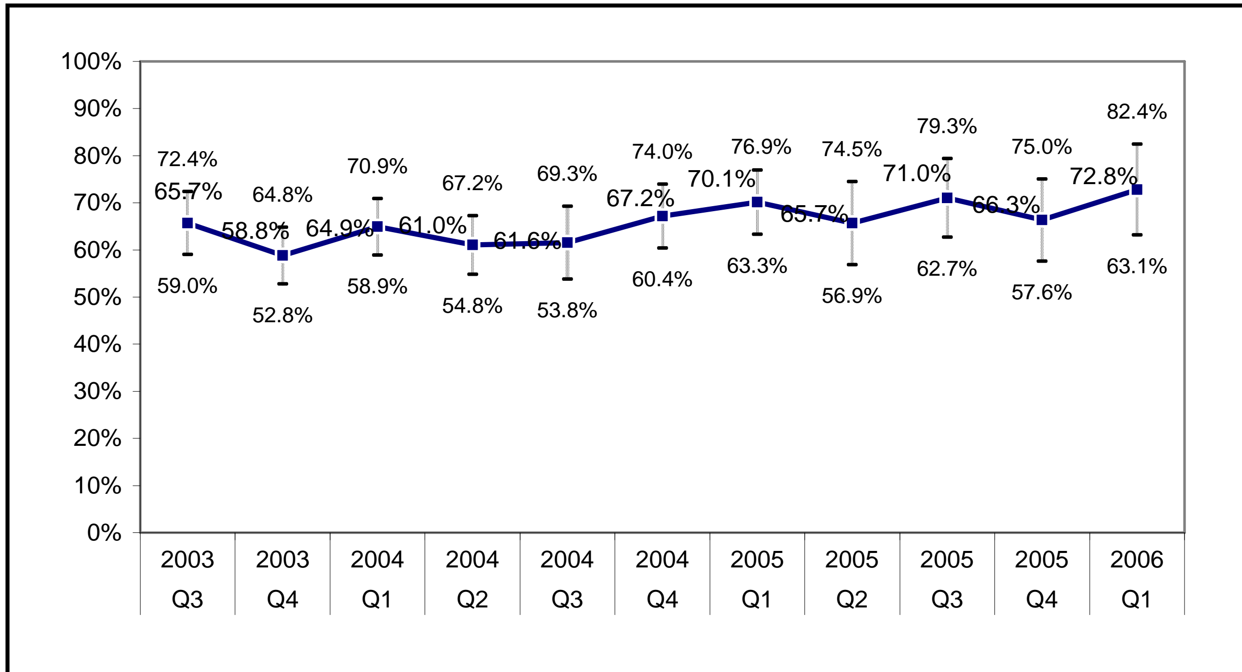


Exhibit 5-5. Percentage of Adult Smokers Who Were Asked if They Smoked When They Visited a Health Care Provider in the Past 12 Months, ATS Q3 2003–Q1 2006

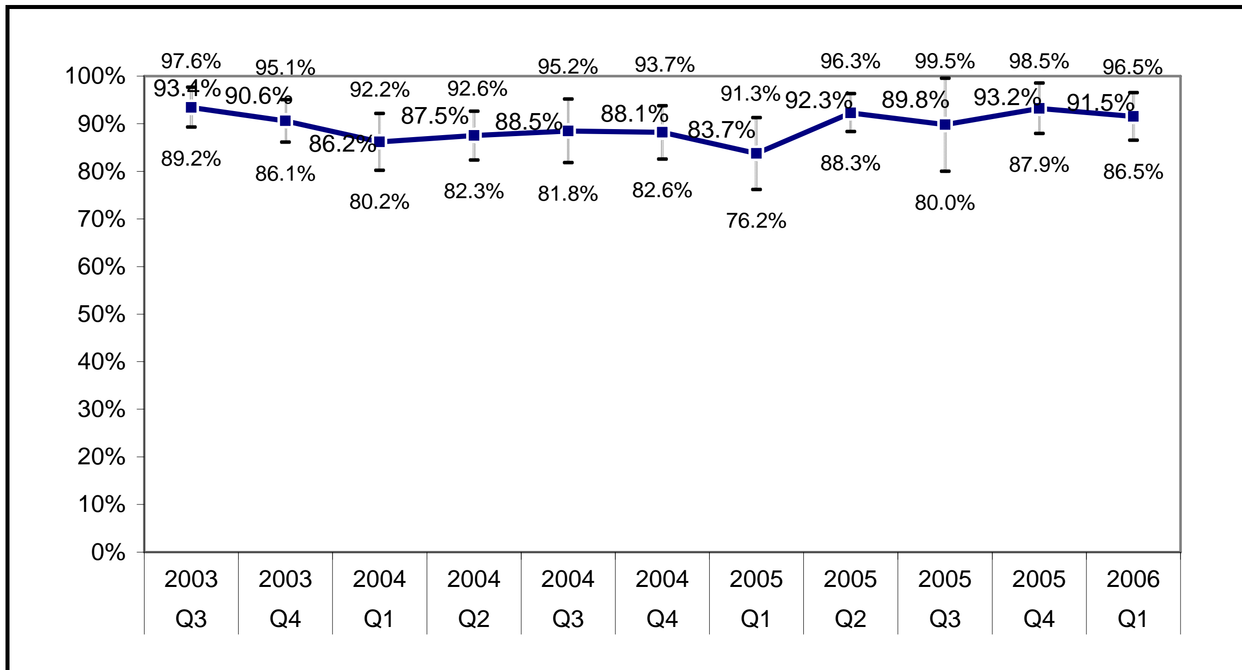


Exhibit 5-6. Percentage of Adult Smokers Who Were Advised to Quit Smoking When They Visited a Health Care Provider in the Past 12 Months, ATS Q3 2003–Q1 2006

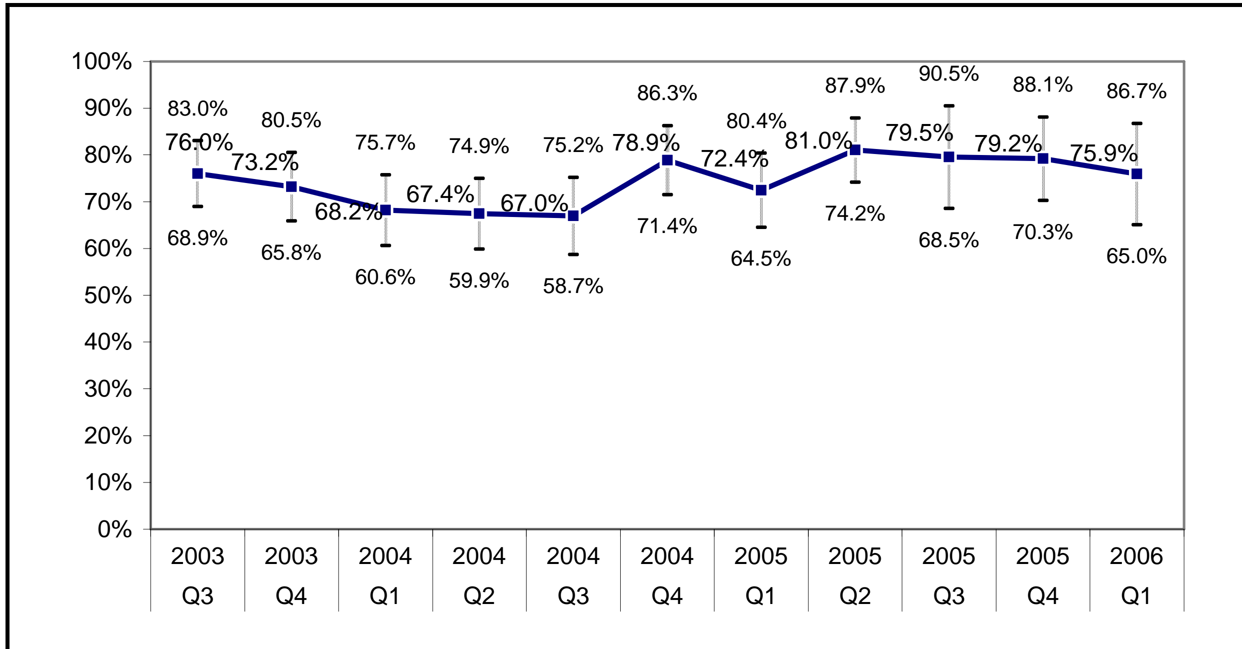
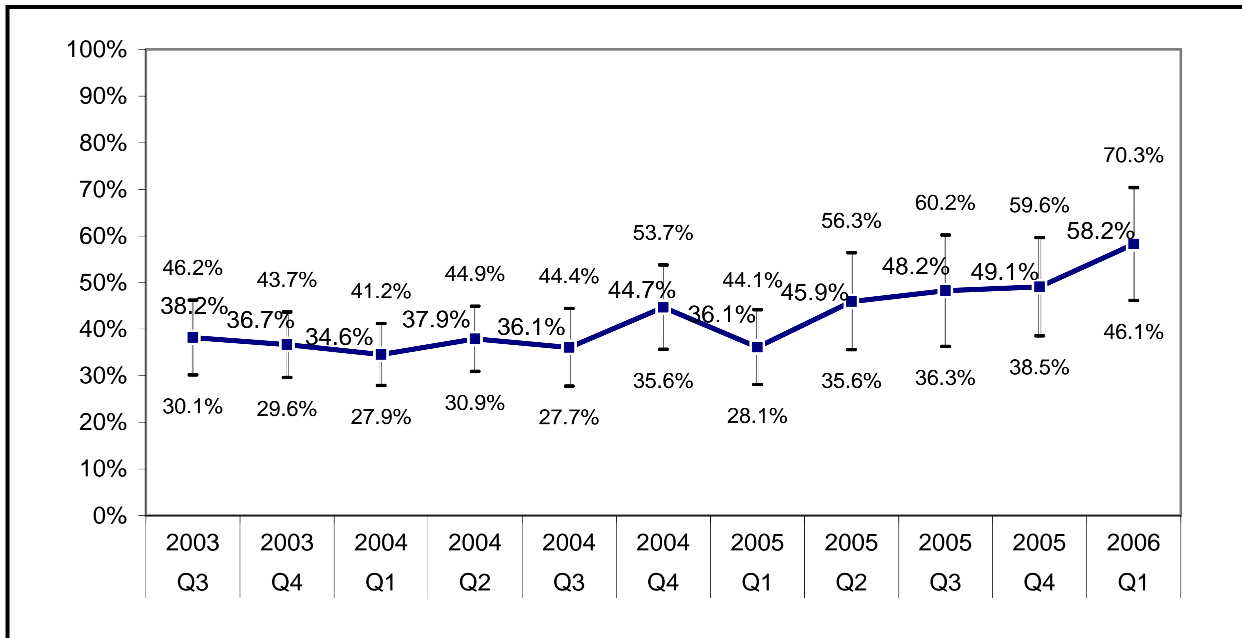


Exhibit 5-7. Percentage of Adult Smokers Who Reported that Their Health Care Provider Assisted Them with Smoking Cessation When They Visited a Health Care Provider in the Past 12 Months, ATS Q3 2003–Q1 2006



We used data from the health care provider surveys and provider organization interviews to examine awareness of Cessation Centers and the Quitline. Exhibit 5-8 illustrates that, by early 2005, 47% of hospital administrators were already aware of a Cessation Center and 26% had already been contacted. In contrast, only 32% of medical practice administrators were aware of a Cessation Center, and 8% had been contacted by a Cessation Center by mid-2005. Some of this difference is due to the fact that a few of the Cessation Centers are located within hospitals that were interviewed. The remainder of the difference is likely due to the fact that Cessation Centers focused on hospitals at this stage of the initiative. In Exhibit 5-9, we present the percentage of health care provider organization administrators who were aware of the New York State Smokers' Quitline and two of its key services: the Fax-to-Quit program and NRT starter kits. As shown, 80% of hospitals and 87% of medical practices were aware of the Quitline, and approximately half were aware of the 2-week starter kits. More than half (52%) of hospitals and one-quarter of medical practices were aware of the Fax-to-Quit program.

Exhibit 5-8. Health Care Provider Organization Administrators' Awareness of Cessation Centers, 2005 Health Care Organization Interview

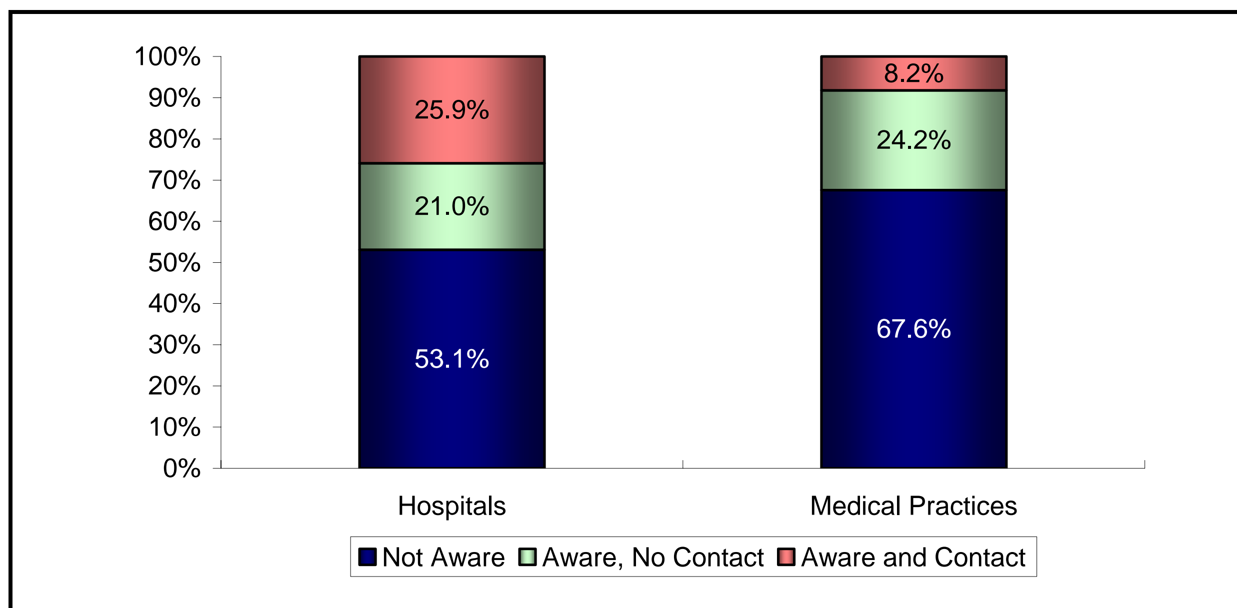
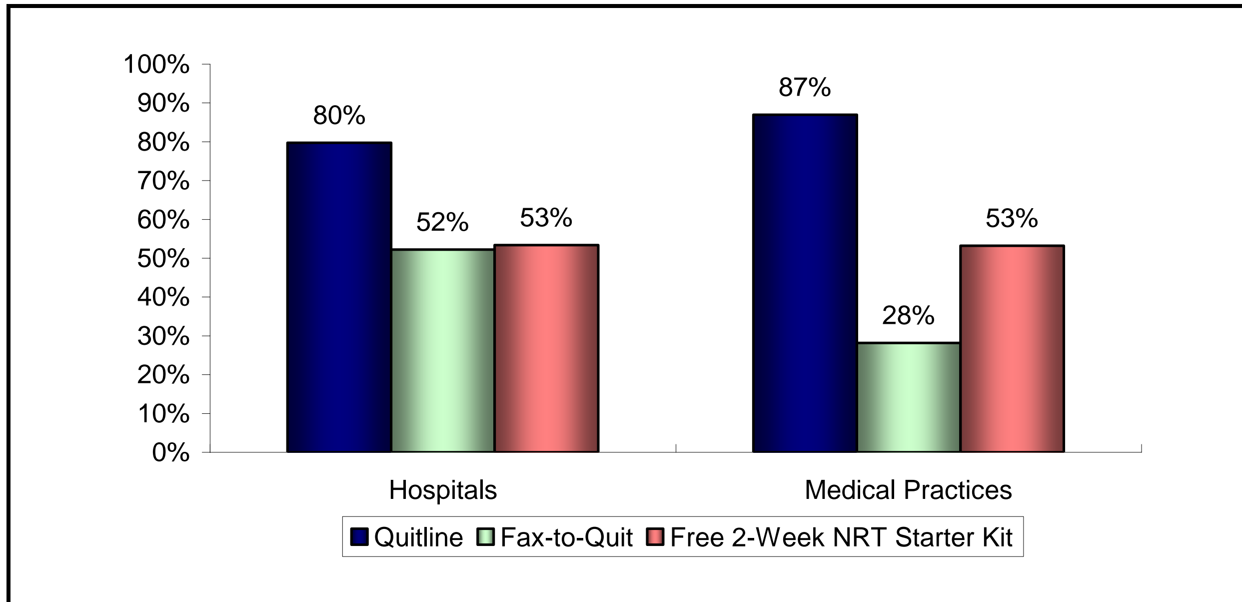


Exhibit 5-9. Health Care Provider Organization Administrators' Awareness of the New York State Smokers' Quitline and Quitline Services, 2005 Health Care Organization Interview



The surveys of health care providers indicate that awareness is considerably lower among providers than among health care provider organization administrators (Exhibit 5-10). More than 80% of physician assistants and nurse practitioners and approximately two-thirds of other health care providers are aware of the Quitline. However, awareness of other Quitline services, such as the Fax-to-Quit program and free NRT starter kits, is considerably lower among all providers. These surveys also indicate that very few providers have had formal training to address tobacco dependence treatment and counseling (Exhibit 5-11).

Exhibit 5-12 presents three key indicators that Cessation Centers are working to change: the percentage of organizations that (1) have systems to screen patients for tobacco use and document tobacco status in the medical record, (2) prompt providers to offer advice to quit, and (3) have written guidelines promoting the "5As." These data indicate that more than 50% of hospitals and 24% of medical practices have systems to screen patients for tobacco use and document patient progress. In addition, nearly two-thirds of hospitals and one-third of medical practices have systems to prompt providers to ask patients about tobacco use (but not systems to document tobacco status in the medical record). Finally, 38% of hospitals and 21% of medical practices have written guidelines to encourage providers to use the 5As.

Exhibit 5-10. Health Care Providers' Awareness of the New York State Smokers' Quitline and Quitline Services, 2005 Health Care Provider Survey

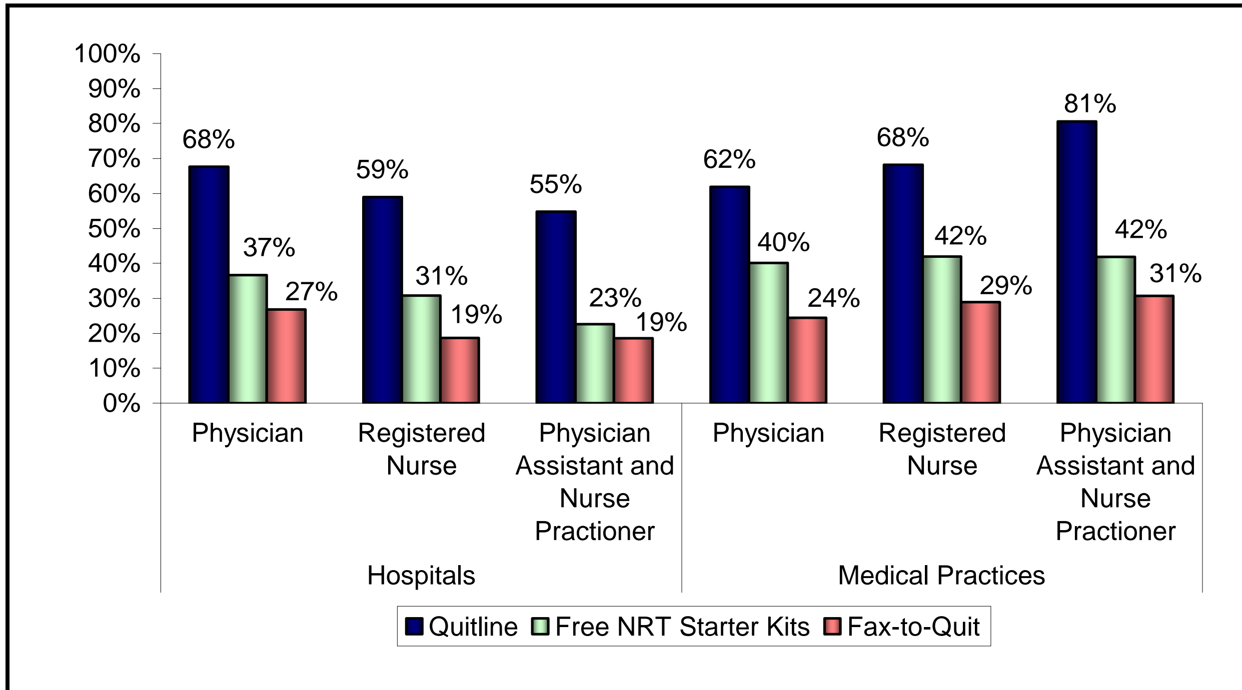


Exhibit 5-11. Percentage of Health Care Providers Who Have Had Formal Training for Tobacco Dependence Treatment and Counseling, 2005 Health Care Provider Survey

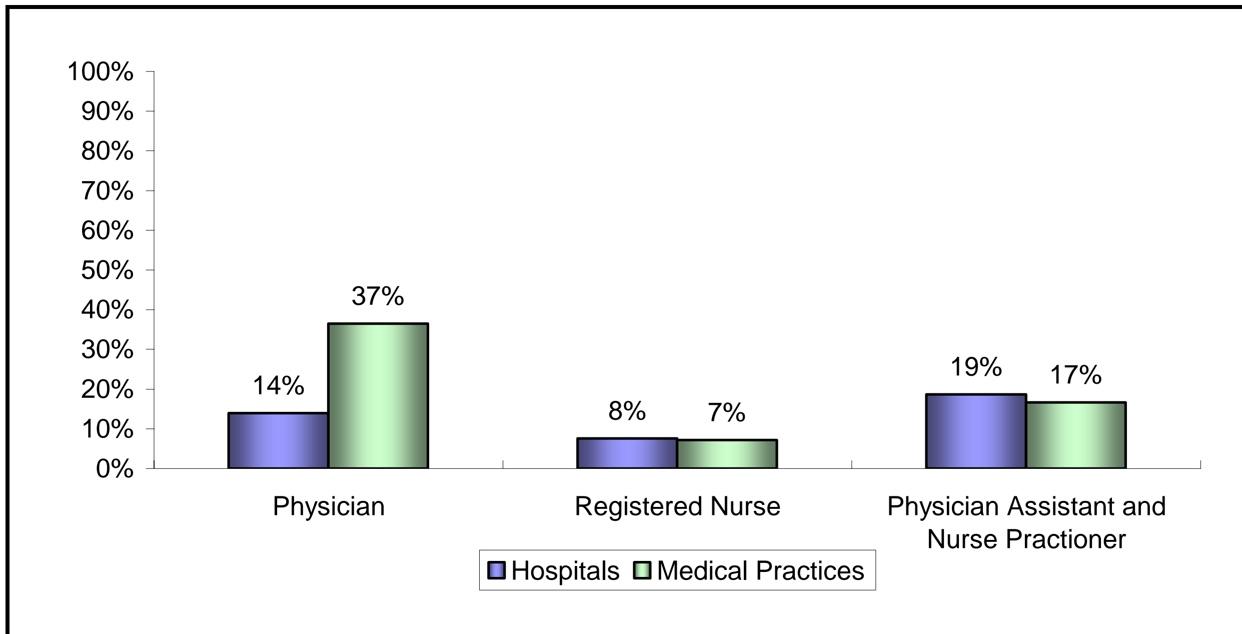
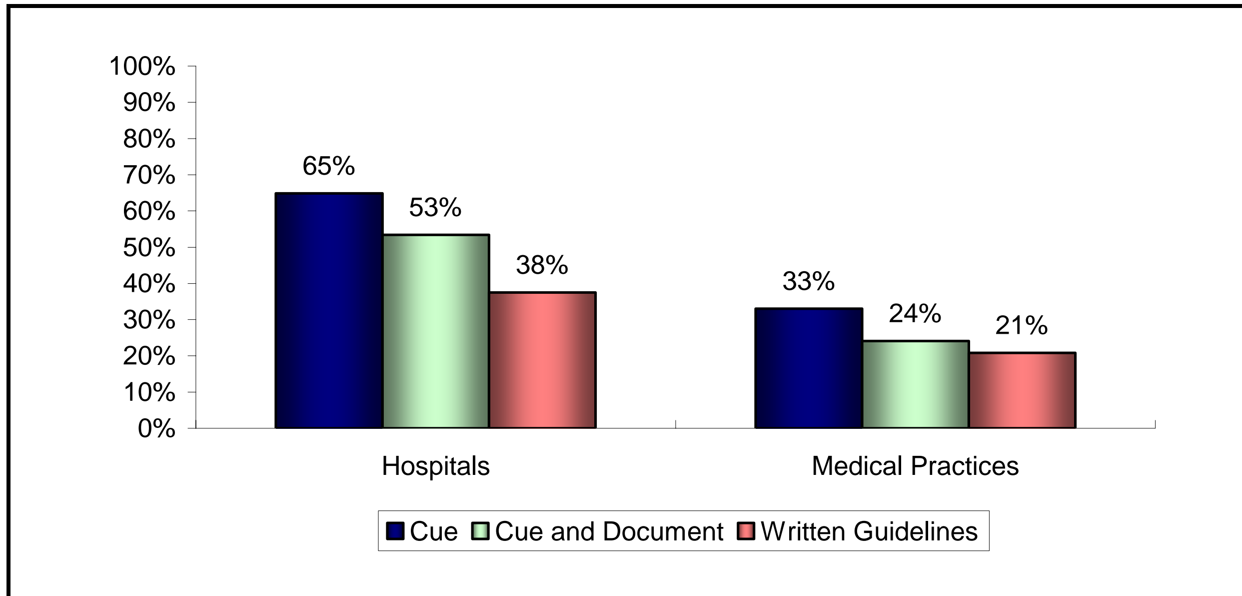


Exhibit 5-12. Percentage of Health Care Provider Organizations that Cue Providers and Document Tobacco Use Status and Cessation Interventions, 2005 Health Care Organization Interview



5.5 Programmatic Implications

During 2005 and early 2006, interactions with targeted health care providers steadily increased. As the year progressed, the Centers transitioned from obtaining buy-in to collaborating with health care provider organizations by providing technical assistance and conducting training sessions.

Qualitative and quantitative data shed light on the barriers Cessation Centers face when working with health care provider organizations: competing priorities, financial barriers, and perceptions that existing systems sufficiently address cessation. These barriers may explain the low baseline percentage of providers (e.g., 14% of providers in hospitals) that have had formal training for tobacco dependence treatment and counseling. However, providers are receptive to participating in training sessions. Cessation Centers have the potential to increase the percentage of providers statewide that have had formal training sessions by implementing best practices, such as providing on-site training or incorporating training sessions into staff meetings. In addition, providing mini-grants to targeted health care providers is a key element in facilitating systems-level changes. The mini-grants would partially reduce financial barriers and may aid in overcoming resistance to implementing system-level changes. Furthermore, the provision of mini-grants in exchange for aggregate data on the numbers of patients screened and counseled allow Cessation Centers to directly track health care provider progress in implementing system-level changes over time.

In addition to the progress that has been made by Cessation Centers, data from the ATS indicate some positive changes in health care provider efforts in promoting cessation. Notably, the percentage of smokers who received cessation assistance from a health care provider substantially increased from mid-2003 (38%) to Q1 2006 (58%). While this increase indicates that progress has been made in providing help to smokers who would like to quit, it is difficult to attribute this progress to Cessation Centers' efforts at this stage of the evaluation.

Baseline data from health care providers and provider organizations indicate that awareness of the New York State Smokers' Quitline Fax-to-Quit program, and free NRT starter kits is relatively low. Although awareness of the Quitline is high (ranging from two-thirds to three-quarters of providers), awareness of the availability of the Fax-to-Quit program and free 2-week NRT starter kits is considerably lower. We expect follow-up surveys to demonstrate marked increases in awareness as a result of Cessation Center activities to promote these services. As noted in Chapter 4, the number of fax referrals and health care provider referrals to the Quitline has increased markedly in the past year.

This year, the Cessation Centers focused on collaborating with hospitals and large health care provider organizations. The Cessation Centers see this as a key strategy to gaining access to medical practices. In light of the progress Cessation Centers have made in obtaining health care provider organization buy-in, the Cessation Center initiative appears to be off to a good start and on course to have an impact.

6. SELECTED COMMUNITY-BASED TOBACCO CONTROL INTERVENTIONS

6.1 Overview of Community-Based Interventions

The New York Tobacco Control Program (NYTCP) funds four types of interventions to promote tobacco control at the community level: Community Partnerships, Youth Action Programs, School Policy Partners, and Cessation Centers. Because the School Policy Partners began statewide work in April 2006, our evaluation focuses on the efforts of the Community Partnerships and Youth Action Programs (Cessation Centers were addressed in Chapter 5). To narrow the focus of our evaluation, we reviewed data from the Community Activity Tracking (CAT) system to select a subset of the most central and active programmatic strategies for the two remaining modalities:

- Reduce the amount of tobacco advertising in the retail environment (Community Partnerships).
- Increase smoke-free homes and cars (Community Partnerships).
- Eliminate smoking in youth-rated movies (Youth Action Programs).
- Promote tobacco advertisement-free magazines (Youth Action Programs).

In the sections that follow, we evaluate progress toward each of these objectives.

6.2 Smoke-Free Homes

Two objectives of NYCTP's goal to eliminate exposure to SHS are to

- increase the percentage of adults and youth who live in households where smoking is prohibited, and
- increase the percentage of adults who drive or ride in vehicles where smoking is prohibited.

In the 2005 Independent Evaluation Report (IER), we concluded that the program should increase efforts to promote smoke-free homes and cars in households with smokers, while ensuring that these interventions are effective and evidence-based. Unfortunately, the evidence base is quite limited. Paid media is an evidence-based approach; in contrast, health care provider and community-based interventions have not been shown to be effective in promoting smoke-free homes. Knowledge of the health risks of exposure to SHS is associated with smoke-free homes, and paid media campaigns increase knowledge of these health risks. Although studies have not made the direct link between paid media and the adoption of smoke-free homes, the evidence suggests that paid media has the potential to promote restrictions on smoking in the home, if messages are appropriately targeted, convincing, compelling, and coordinated with community activities.

For example, the Vermont Tobacco Control Program (VTCP) has used a combination of mass media and community-based efforts with success. Among households with children, the percentage of smokers reporting that their homes are smoke-free increased from 43% in 2001 to 66% in 2005 (Ross et al., 2006). Similarly, the percentage of smokers without children reporting that their homes are smoke-free increased from 30% in 2001 to 43% in 2005. Vermont has consistently employed mass media messages each fall from 2000 to 2005 that highlight the dangers of exposure to SHS and encourage smokers to "take it outside" or to "create a smoke-free zone around your child." From 2003 to date, community-based efforts to promote smoke-free homes have been coordinated to occur primarily during the annual "Take It Outside" media campaign. Community-based activities have focused on obtaining smoke-free home pledges. It is important to note that per capita funding for VTCP has consistently been higher than funding for NYTCP.

In the following sections, we discuss programmatic efforts by Community Partners throughout New York State to promote smoke-free homes. Another programmatic activity that is relevant to these objectives is the use of mass media focusing on the dangers of SHS. These activities were described in Chapter 3.

6.2.1 Programmatic Efforts to Promote Smoke-Free Homes

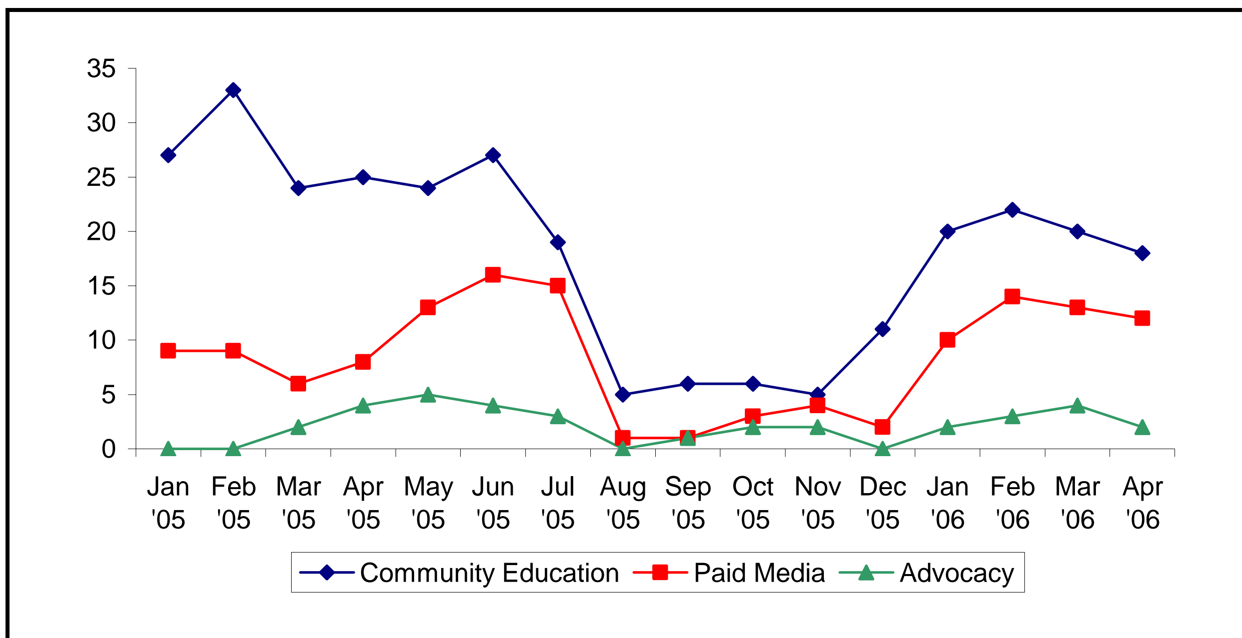
We relied on two data sources to characterize Community Partnerships' efforts to promote smoke-free homes: (1) CAT monthly progress report data for Community Partnerships from January 2005 to April 2006 and (2) semistructured interviews with eight Community Partnerships. CAT captures the strategies that Community Partnerships are using to promote smoke-free homes, how frequently they are working on each of the strategies for the 25 of 29 Community Partnerships that address these objectives, indicators of progress toward their stated goals, and qualitative information on barriers and successes they have identified in doing their work. For the semistructured qualitative interviews with a subset of eight Community Partnerships that are actively addressing this objective, we asked the following questions:

- Describe how you have attempted to educate the community to promote smoke-free homes.
  - What types of activities have you used most often?
  - What factors influenced which community education approach you have used most often?
- How successful do you believe your efforts have been to educate the community about smoke-free homes?
- Are there any valuable lessons learned from your efforts to educate the community about smoke-free homes that you would like to share?
- What strategies or approaches do you believe have been particularly successful?

In Section 6.2.2, we summarize opportunities and challenges identified in CAT data and interviews with Community Partnerships.

Based on CAT data, the two broad categories of strategies that Community Partnerships have used to promote smoke-free homes and cars are paid media and community education (Exhibit 6-1). Paid media activities include planning and implementing multimedia campaigns (e.g., television, radio, billboard, print ads, Web site ads, mass mailings). Television media expenditures by Community Partnerships totaled nearly $1.5 million from January 2005 to April 2006.[1] Activities identified by CAT in the community education category are primarily under information dissemination, mainly at community events and meetings, schools, and community and private workplaces. Other community education activities identified by CAT include planning and implementing smoke-free home/car pledge campaigns; distributing materials about the dangers of SHS at community events; and identifying Partners and collaborators to gain access to targeted groups, such as parents and children, culturally diverse communities, and pet owners.

Exhibit 6-1. Community Partnership Activities to Promote Smoke-Free Homes, CAT System, January 2005–April 2006



[1]Excluding the $6 million Community Partnerships use to collaboratively place statewide media campaigns.

The qualitative interviews indicate that a common community education approach is to distribute smoke-free home/car pledge kits developed by the U.S. Environmental Protection Agency (EPA). Several Partners have worked through health care providers to distribute smoke-free home/car pledges to parents with children. Other partners cited efforts to distribute materials to schools and day care organizations.

Although limited, some Partners have also advocated with landlords and realtors to educate them about the benefits of smoke-free dwelling policies and to promote the adoption of smoke-free dwelling policies.

Some newspaper articles mentioned Partner efforts on SHS issues. For example, the article "New Initiative: Stop Smoking at Home and in Cars," which was published in several newspapers, described a joint effort between two funded Partnerships and the American Cancer Society to encourage pediatricians to educate and advise parents about protecting children from SHS.

6.2.2 Opportunities and Challenges in Promoting Smoke-Free Homes

Data from CAT and the qualitative interviews reveal a number of challenges and opportunities related to promoting smoke-free homes. The Community Partnerships reported struggling with designing and distributing materials, noting unanticipated delays at different stages (e.g., design, production, reorders). Partnerships reported that community education efforts were time-consuming, and several questioned the value of community education efforts, given their low visibility and limited access to the public. For example, one Partnership stated that "health fairs are not that effective at getting pledge forms out." The Partnerships primarily measure their success by the number of smoke-free home/car pledges they receive, but they do not appear to distinguish between homes with and without smokers.

Examples of factors that facilitate success include using a "memorable commercial (e.g., 'Drive') that people loved"; developing long-term relationships with television and radio representatives to obtain value-added from media vendors; and supplying health care providers with "useful, non-threatening secondhand smoke materials and resources that help them to meet their patient care goals." For the most part, we do not have objective data to confirm the Community Partnerships' perceptions of what factors facilitate success. However, we can report New Yorkers' reactions to the "Drive" television ad based on the Adult Tobacco Survey (ATS). Reactions to this ad were comparable to all other ads that focus on the dangers of SHS, suggesting that this ad was not particularly "memorable."

6.2.3 Trends in Smoke-Free Homes and Cars

Exhibits 6-2 and 6-3 show the percentage of smokers who completely prohibit smoking in their homes and cars, respectively. Research has shown that inhabitants of households without smokers, even those that allow smoking in their homes, are rarely exposed to SHS in the home. As shown in Exhibits 6-2 and 6-3, the percentage of households and cars that are smoke-free has remained constant for the past 2 years. Despite media messages focusing on the dangers of SHS (described in Chapter 3) and efforts by 25 Community Partnerships from January 2005 to April 2006, only about one-third of smokers report living in smoke-free homes. These results suggest that the strategies used by NYTCP are either ineffective or have not reached an adequate percentage of the population to effect a change. With the exception of paid media, there are no evidence-based strategies in the literature to guide Community Partnership efforts to promote smoke-free homes and cars, which suggests that an increased level of effort may not successfully promote smoke-free homes and cars. According to EPA, its Smoke-Free Home Program, which encourages families to sign a smoke-free home pledge, has not been rigorously evaluated.

Exhibit 6-2. Percentage of Adult Smokers Who Prohibit Smoking in their Homes, ATS Q3 2003–Q1 2006

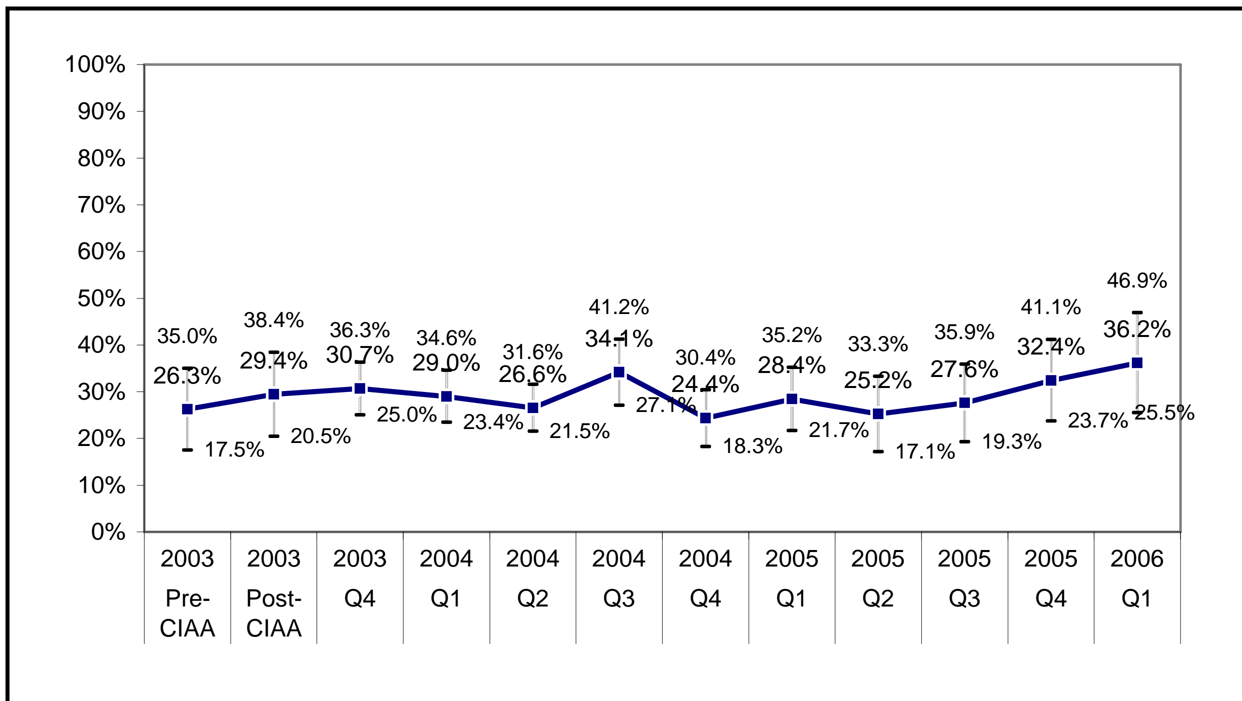
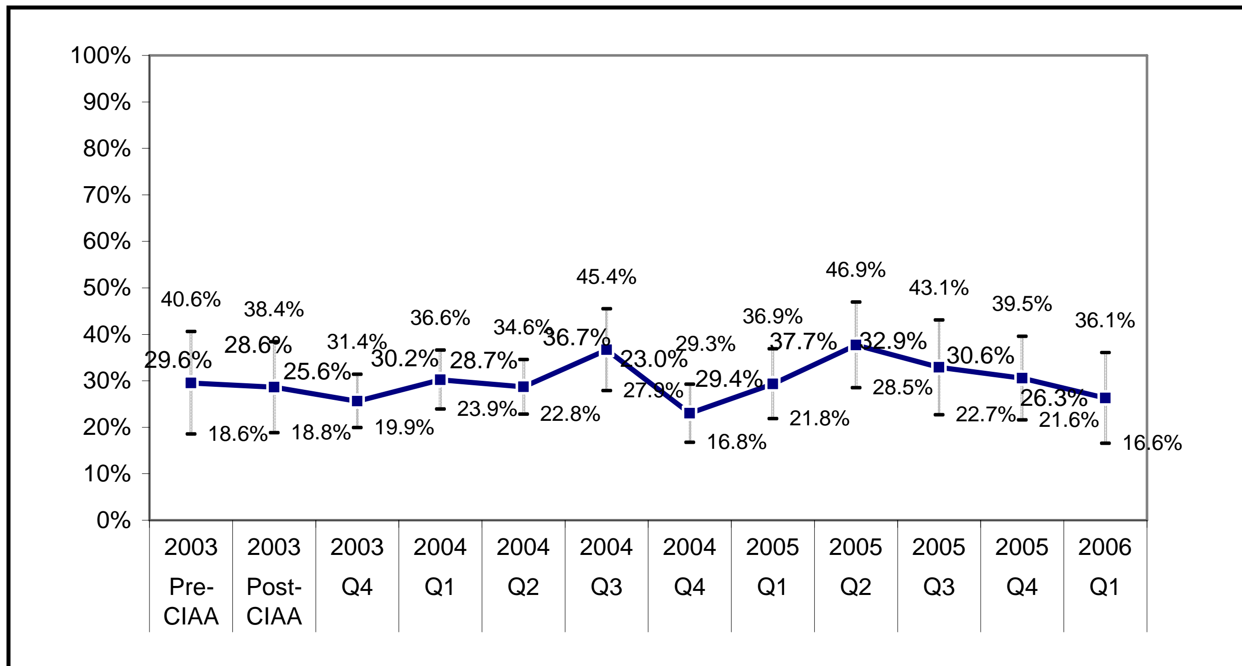


Exhibit 6-3. Percentage of Adult Smokers Who Prohibit Smoking in their Cars, ATS Q3 2003–Q1 2006



In addition to community-based interventions, the Community Partnerships and the New York State Department of Health (NYSDOH) have aired messages that highlight the dangers of SHS. However, awareness of these messages has not been associated with the likelihood of banning smoking in homes or cars (see Chapter 3) among smokers. In addition, as noted in Chapter 3, very few of these messages have explicitly focused on smoke-free homes and cars and none has explicitly called for making homes and cars smoke-free.

6.2.4 Analyses Highlighting Opportunities to Promote Smoke-Free Homes

To explore which factors are correlated with smoke-free homes among smokers, we conducted an analysis of the ATS from the third quarter (Q3) of 2003 to the first quarter (Q1) of 2006. The purpose of this analysis is to highlight specific groups of smokers that may be more likely to ban smoking in their homes and factors that may influence smoke-free home and car policies. Because exposure to SHS is associated with a number of health risks for children (e.g., asthma, upper respiratory diseases, sudden infant death syndrome [SIDS]), we conducted the analysis among all smokers, smokers with children under age 18, and smokers with no children under age 18.

Among all groups of smokers, the odds of banning smoking in the home were dramatically lower the higher a smoker's daily cigarette consumption (Exhibit 6-4). Specifically, compared with those who smoked less than 5 cigarettes a day, smokers who consumed 5 to 20 cigarettes per day were two-thirds less likely—and those who consumed 20 or more

Exhibit 6-4. Odds Ratios for Factors Associated with Smokers Prohibiting Smoking in their Homes, ATS Q3 2003–Q1 2006

Dependent Variable: Smoking Prohibited in the Home	All Smokers	Smokers with Children Under Age 18	Smokers without Children Under Age 18
Trend	1.01 (0.78)	1.08* (0.02)	0.96 (0.17)
Male	1.49** (0.00)	1.73** (0.00)	1.32 (0.09)
Children under age 5 in the household	2.06** (0.00)	1.34 (0.14)	
Children between age 5 and 17 in the household	1.66** (0.00)		
Urban indicator	0.92 (0.53)	0.80 (0.27)	1.09 (0.65)
Strongly agree/agree that SHS causes lung cancer	1.44* (0.02)	1.27 (0.30)	1.46 (0.05)
Strongly agree/agree that SHS causes respiratory problems in children	1.12 (0.59)	1.32 (0.37)	1.03 (0.90)
In favor of the New York Clean Indoor Air Act	1.90** (0.00)	2.19** (0.00)	1.74** (0.00)
Aware of SHS media messages	0.85 (0.59)	0.68 (0.37)	0.94 (0.86)
Aware of cessation media messages	0.54 (0.12)	0.25** (0.00)	1.01 (0.98)
Made a quit attempt in the last 12 months	1.31 (0.05)	1.39 (0.11)	1.29 (0.16)
Aware of SHS media messages and made a quit attempt in the last 12 months	1.21 (0.64)	0.93 (0.91)	1.51 (0.44)
Aware of cessation media messages and made a quit attempt in the last 12 months	1.15 (0.76)	1.39 (0.58)	0.90 (0.86)
Average Number of Cigarettes per Day (Reference: Less than 5)			
5–20	0.68* (0.02)	0.44** (0.00)	0.83 (0.37)
20+	0.30** (0.00)	0.22** (0.00)	0.28** (0.00)
Age (Reference: 18–24 years)			
25–39	0.69 (0.07)	0.77 (0.32)	0.65 (0.13)
40–64	0.53** (0.00)	0.44** (0.01)	0.51** (0.01)
65+	0.35** (0.00)	2.01 (0.45)	0.27** (0.00)

(continued)

Exhibit 6-4. Odds Ratios for Factors Associated with Smokers Prohibiting Smoking in their Homes, ATS Q3 2003–Q1 2006 (continued)

Dependent Variable: Smoking Prohibited in the Home	All Smokers	Smokers with Children Under Age 18	Smokers without Children Under Age 18
Race/Ethnicity (Reference: White)			
African American	0.39** (0.00)	0.28** (0.00)	0.46** (0.00)
Hispanic	0.77 (0.24)	0.77 (0.38)	0.78 (0.39)
Other	0.60* (0.04)	0.51 (0.12)	0.65 (0.19)
Income (Reference: Less than $30,000)			
$30,000–$59,999	1.45* (0.02)	1.95** (0.01)	1.08 (0.70)
$60,000–$89,999	1.99** (0.00)	2.22* (0.01)	1.80* (0.02)
$90,000 and more	2.48** (0.00)	2.14* (0.02)	2.90** (0.00)
Missing income information	2.83** (0.00)	2.91** (0.00)	2.51** (0.00)
Education: (Reference: Less than High School)			
Completed high school	1.17 (0.48)	1.54 (0.17)	0.79 (0.46)
Some college	1.22 (0.40)	1.64 (0.13)	0.81 (0.52)
College degree or more	1.39 (0.20)	3.02** (0.00)	0.68 (0.25)
Number of observations	3,963	1,458	2,505

Note: p values are shown in parentheses.
*Significant at 5%.
**Significant at 1%.

cigarettes a day were approximately one-third less likely—to ban smoking in their home, on average. The presence of children in the household was another important correlate, with the presence of both younger (aged 5 and younger) and older (aged 5 to 17) children increasing the odds of having a home smoking ban. On average, older smokers (40 and older) were less likely to implement a home smoking ban than younger smokers. African-American and Hispanic smokers were significantly less likely to ban smoking in their homes

than their White, non-Hispanic counterparts. A smoker's income was also a strong correlate of home smoking policies. Among households with children, smokers with at least a college degree had a greater odds of having a smoke-free home than smokers with less than a high school degree. On average, the higher a smoker's income, the greater the odds of having a home smoking ban. Several attitudes and beliefs about smoking were strong predictors of home smoking policies. Overall, the odds of a smoker having a home smoking ban were increased if the person agreed that SHS exposure causes lung cancer and if the person was in favor of the New York Clean Indoor Air Act. Agreeing that SHS causes respiratory problems in children was uncorrelated with having a home smoking ban.

6.2.5 Programmatic Implications

As seen in Exhibits 6-2 and 6-3, there has been no change over time in the percentage of adult smokers with smoke-free homes and cars. These results suggest that the program's strategies are ineffective, do not reach an adequate proportion of the population to effect a meaningful change, are not appropriately targeted, or are not sufficiently coordinated across the state and between media and community activities. Because of the lack of an evidence base for community activities for promoting home restrictions, as well as the Partner's own perception that these community activities are less effective in promoting home restrictions than paid media, we suggest greater emphasis on appropriately targeted paid media with adequate reach to effect change. This may be best accomplished if implemented by NYSDOH rather than by the Community Partnerships.

In light of the success of VTCP, which effectively combined paid media and community activities to promote a meaningful change in the percentage of smokers who implemented smoking bans in their households, we suggest that NYTCP consider (1) increasing emphasis on paid media activities, (2) consistently including a message to create smoke-free homes in SHS media messages, and (3) coordinating media and Partner activities statewide and concentrating activities during a certain time of year (e.g., "back to school" time). A coordinated statewide media campaign promoting smoke-free homes and cars, with a distinct call to action such as "create a smoke-free zone around your child" and concentrated during a certain time of year has the potential to be recognizable and effective. Such synchronized and focused statewide activities would help alleviate some of the problems Partnerships reported with developing and distributing related materials by presenting greater opportunities for Partnerships to coordinate and pool resources. The recent U.S. Surgeon General's Report on the "Health Consequences of Involuntary Exposure to Tobacco Smoke" (USDHHS, 2006) provides new evidence about the health effects of exposure to SHS. This report can enhance the credibility of public education efforts and provide new information about the dangers of SHS.

In conjunction with any annual media campaign, Partners could also focus efforts on activities promoting smoke-free multidwelling policies. Although there is not a wide evidence

base for the strategy of promoting, for example, smoke-free apartments, and the practice has not been used extensively by Partners, it is potentially promising for reducing unintended SHS exposure. Educating landlords and tenants about the option of a smoke-free apartment policy has the potential to affect a significant number of households and could increase the number of smoking households with smoking bans.

6.3 Advertising, Sponsorship, and Promotions Initiative

Research indicates that tobacco product advertising including point of purchase advertising and promotion encourage youth smoking and communicate to the community that tobacco use is a normative and accepted behavior. To counter the influence of these advertising efforts and to decrease the social acceptability of tobacco use in New York State, NYTCP and its funded Community Partnerships and Reality Check Youth Action Partners [see note on page 6-1] (Youth Partners) are conducting interventions to reduce advertising and promotions at the point of sale, in magazines and movies, and at community events. This section focuses on Community Partnership and Youth Action Partner activities to reduce such advertising and promotion.

To counteract the tobacco industry's efforts to promote tobacco, NYTCP launched the Advertising, Sponsorship, and Promotion (ASP) Statewide Initiative in January 2005 as part of its strategic plan to decrease the social acceptability of tobacco use. The Strategic Plan long-term objectives are to

- reduce tobacco advertising and promotions in the retail environment;
- eliminate smoking and tobacco imagery from youth-rated (i.e., G, PG, and PG-13) movies;
- increase the number of magazines and newspapers that have a written policy against accepting tobacco company or product advertising; and
- reduce tobacco sponsorship and promotions occurring at sporting, entertainment, and other community events.

In the following sections, we describe and evaluate three key ASP interventions: reducing tobacco advertising and promotions in the retail environment, promoting smoke-free movies, and reducing tobacco advertising in magazines and newspapers.

6.3.1 Programmatic Efforts to Reduce Retail Tobacco Advertising

The Community Partnerships and Youth Partners are designing and implementing countermarketing strategies to combat the pervasiveness and strength of tobacco industry marketing tactics, including tobacco company's retailer incentive programs. Industry incentive programs provide retailers with an additional annual income tied to their compliance with strategic placement of industry-made advertisements, provision of premium shelf space for product placement, and promotional discounts on volume

purchases. Research on tobacco industry strategies in the retail environment has found that stores participating in industry incentive programs can be recognized by their advertisements and promotions. Other research in this area has found that

- an estimated 62% of tobacco retailers participate in industry incentive programs (Feighery et al., 1999);
- contracts for retailer incentive programs can last 30 days, 90 days, or longer (Feighery et al., 2003);
- retailers participating in these programs have little control over the levels and placement of advertisements or the amount of promotions in their stores (Feighery et al., 2003); and
- storeowners received an average of $2,462 in 1997 from participation in retailer incentive programs (Feighery et al., 1999).

The New York Cigarette Retailer Survey also provides data on retail incentive programs. This study was conducted between September 2005 and February 2006 and consisted of 15-minute telephone interviews with 674 licensed cigarette retailers in New York State. Among other topics, the study investigated the extent of retailer participation in tobacco company–sponsored incentive programs. The study found that 66% of all interviewed retailers participated in industry incentive programs. This study showed that participation in industry incentive programs varies by retail channel—79% among convenience stores, 50% among large grocery stores, 41% among pharmacies, and 33% among mass merchandisers.

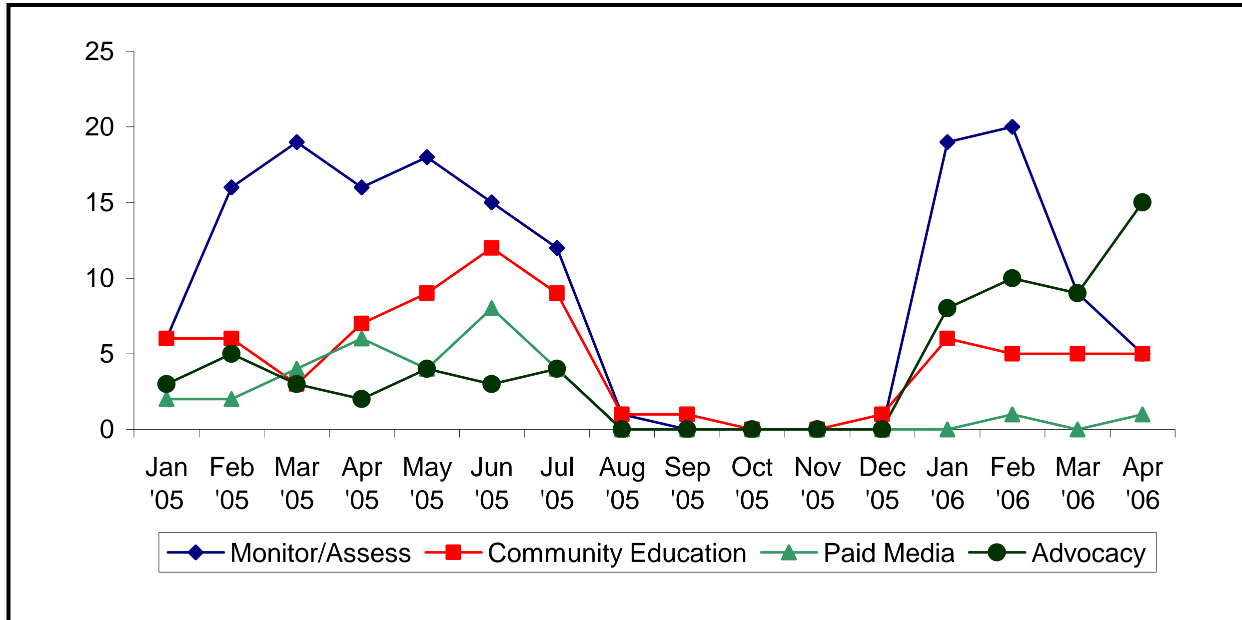
To understand the strategies Community Partnerships have implemented to address this objective, we reviewed data from the CAT system. We also conducted qualitative interviews with eight members of Community Partnerships to better understand the types of strategies used to reduce tobacco advertising and promotions and factors that facilitate or impede this work.

Our analysis of CAT and interview data found that, from January 2005 to April 2006, Community Partnerships contributed to this objective, and the majority of the activities centered on four types of activity:

- monitoring and assessing retail advertising and promotional practices
- community education
- paid media
- advocacy strategies to influence decision makers to work toward eliminating advertisements and promotions in the retail environment

Results from the CAT data show that the most common activities were assessing the retail environment and developing program strategies based on these assessments (Exhibit 6-5). The assessments involved collecting data on retail advertisements and promotions as part of the Retail Advertising Tobacco Study (RATS). Community Partnerships surveyed an average of 165 cigarette retailers each month from February 2005 through February 2006. Exhibit 6-5 also shows that, by February 2006, most Community Partnerships finished conducting RATS surveys and increased their efforts on advocacy activities.

Exhibit 6-5. Community Partnership Strategies Related to Reducing Tobacco Advertising in the Retail Environment, CAT System, January 2005–April 2006



The most common advocacy activities reported by Community Partnerships between January 2005 and April 2006 were mass mailings to store owners advocating elimination of tobacco advertisements, offering appreciation incentives to retailers complying with NYTCP strategies, and working with other NYTCP Community Partnerships in a region to target franchise chain owners to change their tobacco advertising and promotion policies. Partnerships' advocacy interventions with retailers are designed to eliminate, reduce, or rearrange tobacco advertising within each store. NYTCP Community Partnerships select the retailers for intervention using RATS data or by other means and target retailers displaying very high, or very low, numbers of advertisements (the former for their vast intervention potential and the latter because retailers displaying few advertisements may not depend on tobacco industry retailer incentive programs as a significant source of income, so they may be more open to intervention).

To a lesser degree, Community Partnerships also conducted paid media campaigns and community education. The most common activities in community education were conducting recognition events, where NYTCP Community Partnerships honored retailers for not advertising or selling tobacco products; disseminating ASP press releases to local newspapers; and awarding mini-grants to local organizations to work toward reducing tobacco ads visible to youth. Exhibit 6-5 shows the same apparent lull in activities between August 2005 and December 2005 observed for activities aimed at other objectives. However, RTI continued to receive RATS surveys conducted by Community Partnerships during this time, so we attribute part of the lull to Community Partnerships' underreporting of activities in the CAT system while their contracts were being modified.

6.3.2 Opportunities and Challenges in Decreasing Retailer Advertisements

Our analysis of CAT and qualitative interview data shows that Community Partnerships faced several significant barriers when conducting advocacy interventions, including the following:

- difficulty contacting store owners or managers, who are seldom on premises
- nonresponse to NYTCP Community Partnerships' letters by retailers and corporate offices of franchise stores
- store managers indicating that placement of tobacco advertisements is a corporate policy that cannot be changed at the store level
- store owners' fear of loss of incentives from tobacco companies and/or decrease in sales
- retailers' lack of awareness of the impact of tobacco ads on youth smoking

While advocacy efforts have only recently begun in earnest, Community Partnerships did indicate some promising strategies. Community Partnerships recommended targeting locally owned stores that have only a few advertisements first and then approaching franchise headquarters from large retail chains to promote policies that reduce or eliminate point-of-purchase tobacco advertising in their stores statewide. Community Partnerships also perceive that drawing retailers' attention to the impact of advertising on youth smoking is persuasive:

> *"...Noticing there was a school crosswalk that runs in front of store, [Partner] approached retailer about the impact this has on youth and store owner responded that he gets cigarettes cheaper [from tobacco companies] if he puts up tobacco ads. [Partner] challenged him to take the sign down and see what happens when the tobacco rep comes in. He went to the window and replaced the tobacco ad with a milk ad."*

Finally, many of the Community Partnerships believe that providing incentives to cooperative retailers is important, but they are still trying to determine the most appropriate incentive strategies.

All Community Partnerships are moving forward in designing or implementing interventions to reduce retail cigarette advertisements. However, some Community Partnerships expressed frustration that there was little guidance from NYTCP about which interventions to implement or how to work with retailers. Although NYTCP provided Community Partnerships with an ASP Statewide Initiative Toolkit with detailed guidance and resources on retailer interventions, Community Partnerships are experiencing many obstacles in their efforts. One Partner summarized feedback from other Community Partnerships during an area meeting discussion of experiences with implementing retail interventions:
"It doesn't seem like they've [Partners] accomplished a lot for all of the work done and attempts they have made [with retailers]."

During the first year of the ASP initiative, NYTCP expected Community Partnerships to concentrate their work on retail surveillance activities and on planning retail interventions for the following year. In the second year of ASP, the Community Partnerships' key objective was to conduct interventions to rearrange, reduce, or eliminate tobacco advertising in three retailers within their catchment areas by July 2007. Based on the focus of Community Partnerships' activities to date, Community Partnerships are on track to reach this objective. Throughout 2005, Community Partnerships had relatively few active advocacy strategies, and Community Partnerships that did advocate for policy change faced significant challenges.

6.3.3 Reducing Tobacco Advertising and Promotions in the Retail Environment

RTI and NYTCP designed and implemented RATS as a surveillance system to monitor tobacco advertising and promotions in a random sample of tobacco retailers statewide. This system provides data against which to measure changes in the level of point-of-purchase advertising and promotion.

Prior to the launch of ASP, RTI subcontracted with Research Diagnostics Inc. (RDI), to conduct a baseline data collection in November 2004 of 2,266 retailers. In March 2005, after extensive training, NYTCP Community Partnerships and RDI began RATS data collection on a monthly basis. RDI's efforts eased NYTCP Community Partnerships' burden so that NYTCP Community Partnerships could spend more time preparing for ASP interventions and less time conducting RATS assessments.

In 2005, NYTCP Community Partnerships collected data from 1,648 retailers, and RDI collected data from 658 retailers. In this section, we present findings from assessments of

4,572 retailers between November 2004 and December 2005. We examined changes in the following indicators of advertising and promotions among all surveyed retailers:

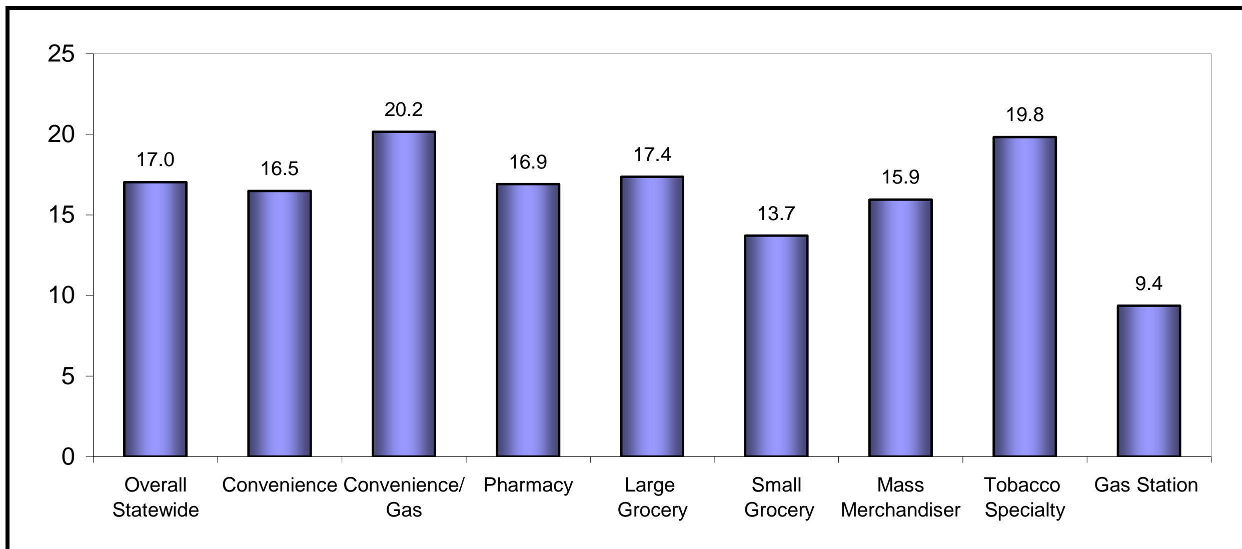
- percentage of retailers with zero advertisements
- average number of interior advertisements per retailer
- percentage of retailers with exterior advertisements
- percentage of retailers with cigarette pack promotions

We conducted regression analyses for each of these indicators to test for changes over time (with a monthly time trend) and differences by NYTCP program areas and retail channels. For each of the indicators, we display differences by retail channel to highlight where advertising and promotions are greatest. We also conducted tests of change over time, but there were no statistically significant trends.

Cigarette Advertisements in Tobacco Retail Establishments

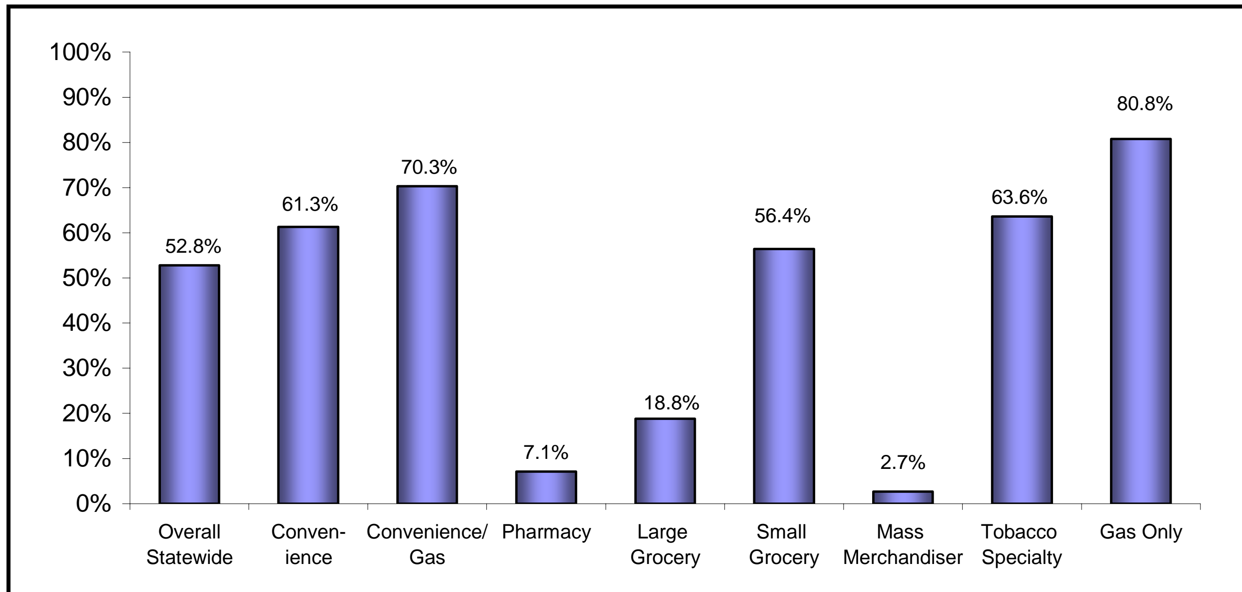
Overall, between November 2004 and December 2005, 4% of stores had no interior or exterior cigarette ads. Nearly all (95%) tobacco retailers had interior cigarette advertisements. There were statistically significant differences across retail channels—convenience/gas and tobacco specialty stores had the highest average number of interior ads with 20 ads per store, while small grocery stores and gas stations had the lowest average (Exhibit 6-6).

Exhibit 6-6. Average Number of Interior Cigarette Advertisements per Retailer by Retail Channel, RATS, November 2004–December 2005



The percentage of tobacco retailers with exterior cigarette advertising was 53% on average, with considerable variation across retail channels (Exhibit 6-7). The percentage of stores that have exterior cigarette advertising ranged from a low of 3% of mass merchandisers to a high of 81% of gas stations. Other channels with relatively few stores with exterior cigarette advertisements include pharmacies (7%) and large groceries (19%).

Exhibit 6-7. Percentage of Tobacco Retailers with Exterior Advertisements by Retail Channel, RATS, November 2004–December 2005



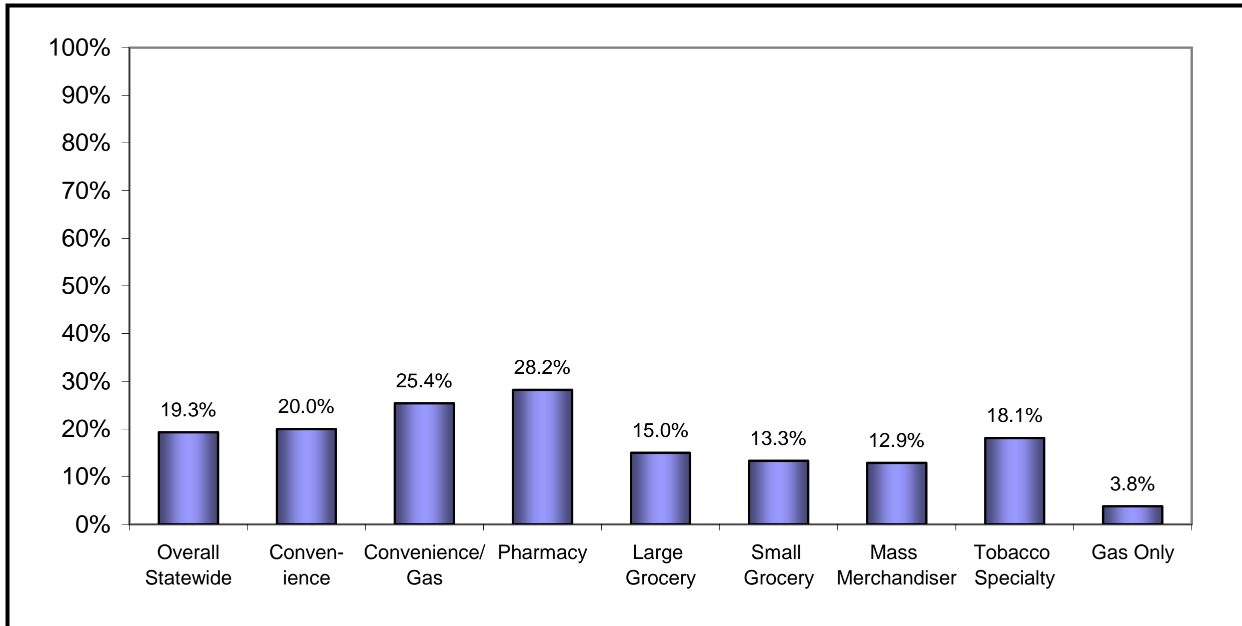
Cigarette Pack Promotions in Tobacco Retail Establishments

The RATS surveillance system captures data on cigarette promotions, such as rebates, multi-pack discounts (e.g., buy-one-get-one-free sales), bundles, and free gifts attached to cigarette packages, for three popular brands (Marlboro, Newport, and Doral) and a fourth brand defined as the cheapest brand outside of these three. Cigarette pack promotions varied significantly by retail channel. We found that pharmacies and convenience/gas retailers had significantly more pack promotions than any other retail channel (Exhibit 6-8).

6.3.4 Programmatic Implications

Cigarette advertising is pervasive in licensed tobacco retailers in New York State. Community Partnerships encountered extensive challenges in convincing retail owners to eliminate tobacco advertising and promotions from their stores. Interventions requiring small retailers that participate in industry incentive programs to eliminate cigarette advertisements would result in a decrease in their annual income on the order of $2,000 or more. CAT system data and interviews with Community Partnerships indicate that they

Exhibit 6-8. Percentage of Retailers with Cigarette Promotions by Retail Channel, RATS, November 2004–December 2005



are exploring innovative strategies to counter the incentives provided by cigarette companies.

Currently, the most common strategy used by Community Partnerships is to target tobacco retailers with the least amount of cigarette advertisements in an attempt to encourage these retailers to eliminate all cigarette advertising. This is a sensible approach and will need to build quickly moving forward to have a significant impact. The NYTCP Strategic Plan calls for a reduction in the amount of tobacco advertising in the retail environment by 2009. Presently, most NYTCP Community Partnerships aim to change advertising policies in only one or two retailers in their area, with a couple of Community Partnerships working with retail chains such as Wilson Farms and Stewarts. These objectives are realistic given the exploratory nature of their work in 2005 designing new tobacco control interventions. However, moving forward, Community Partnerships will need to significantly increase their annual goals to have an impact on New Yorkers' exposure to cigarette advertising statewide. With more than 24,000 licensed tobacco retailers statewide, this is a daunting task.

With respect to eliminating exterior advertisements, the RATS and Tobacco Retailer Survey data suggest that Community Partnerships should consider concentrating on mass merchandisers, large grocery stores, and pharmacies because these retail channels are less likely to participate in tobacco industry incentive programs and have a lower percentage of stores with any exterior cigarette advertisements, and they rely less on tobacco revenue as

a percentage of total revenue than other channels. For example, in 2002, 23% of total convenience store revenue in New York came from tobacco sales, while the comparable percentage for both pharmacies and large grocery stores was 2% and 4% for mass merchandisers (U.S. Department of Commerce, 2005). Because cigarette sales constitute a smaller fraction of total revenue for these retailers than retailers in other channels (e.g., convenience/gas) and they rely less on incentive programs, the Community Partnerships should investigate whether these retailers are more receptive to change. Pharmacies and large grocery stores, especially locally owned or operated, may be more sensitive about their image in the community and therefore more receptive to change. Some Community Partnerships have been working with local chain stores, and we recommend continuing to explore the strategy of working with corporate offices because it has a greater potential to have an impact regionally or with a larger number of stores within a region.

6.4 Smoke-Free Movies Initiative

Two recent studies highlight the extent of smoking in the movies and the influence that exposure to smoking in the movies has on youth smoking. A review of studies by Charlesworth and Glantz (2005) found that smoking in the movies decreased from 1950 to 1990 and then increased markedly from 1990 to 2003 and that movies rarely show the negative health outcomes associated with smoking. They also found that smoking in the movies is associated with youth smoking and that viewing antismoking advertisements before viewing movies with smoking seems to curb the influence smoking in the movies has on youth smoking.

Sargent et al. (2005) showed a strong correlation between youth's exposure to smoking in the movies and youth smoking. The authors conducted a nationally representative survey of youth aged 10 to 14 and found that 10% of youth had tried smoking. Exposure to smoking in the movies in this study was significantly associated with the prevalence of smoking initiation. Youth in the study were classified into four quartiles of exposure to smoking in the movies: 2% of youth in the lowest-exposure quartile had tried smoking, compared with 22% in the highest-exposure quartile. After controlling for other factors, the adjusted odds ratio (OR) for having tried smoking was 2.6 (95% confidence interval [CI]: 1.7, 4.1) for the highest-exposure quartile (with the lowest-exposure quartile as the reference group).

To limit the influence of smoking in the movies, NYTCP has set two programmatic objectives in its Strategic Plan:

- Increase the percentage 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.

A main focus of the Youth Partners is eliminating smoking in movies rated G, PG, and PG-13 by pressuring the Motion Picture Association of America (MPAA) to give an "R" rating to movies that contain smoking or tobacco imagery. Youth Partners seek to motivate parents, Parent Teacher Associations (PTAs), community organizations, and legislative bodies to express their views about smoking in the movies and the R rating to the MPAA and to adopt 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 to challenge social norms about the acceptability and desirability of smoking images in the movies. Achieving policy change in Hollywood will likely take years. However, these efforts are part of a larger national effort that includes other state tobacco control programs, the national PTA, the American Association of Pediatricians, the American Legacy Foundation, and the Campaign for Tobacco-Free Kids. The Smokefree Movie Initiative has been underway for a number of years, with specific strategies evolving and changing over time.

The short-term goal of these activities is to increase awareness among community members, key opinion leaders, and Hollywood leaders about the influence of smoking in movies on youth tobacco initiation and use. In this chapter, we describe the efforts and impact of Youth Partner activities to achieve these objectives.

6.4.1 Programmatic Efforts to Promote Smoke-Free Movies

As with other programmatic objectives, we relied on data from CAT and qualitative interviews with eight Youth Partners to describe efforts to promote smoke-free movies. The questions for the qualitative interviews were as follows:

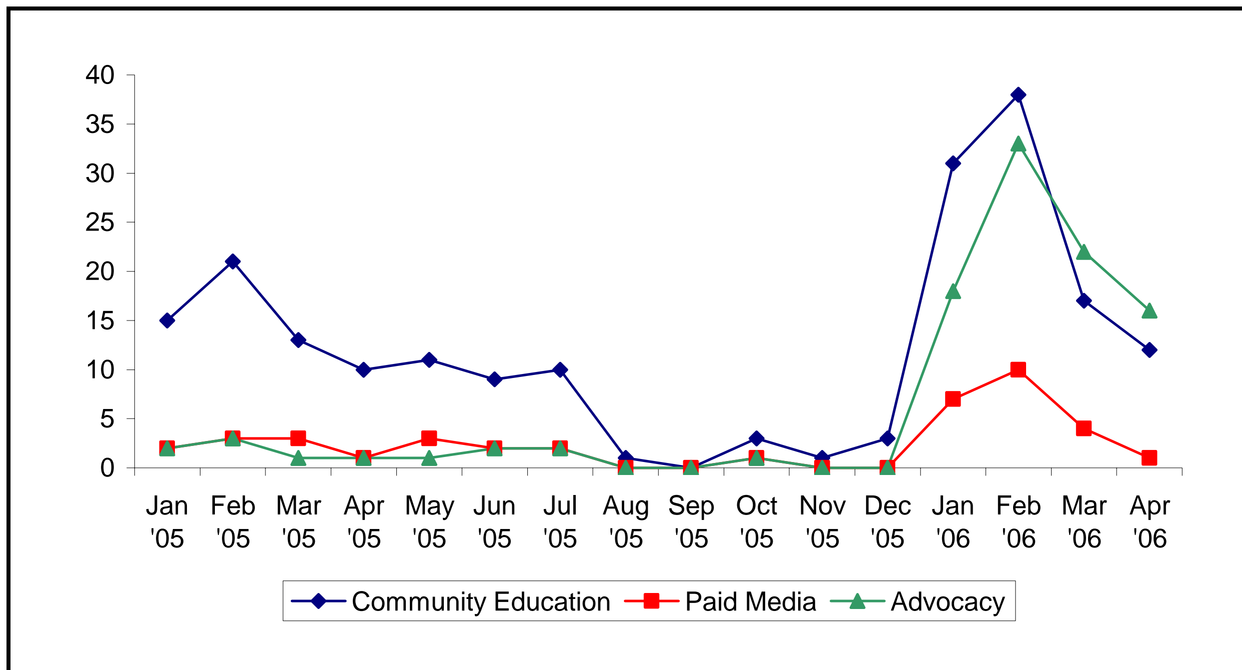
- There seem to be three most commonly used ways of advocating for the movie production industry to decrease the amount of smoking in movies:
  - targeting the MPAA with cards and letters collected from various sources;
  - getting resolutions signed by community groups/organizations, like PTAs or local government; and
  - working with individual theaters to get them to take a stand.

  Of these three, which would you say you have focused on the most?
- How did you make the decision to target most of your effort there?
- Please describe how you have attempted to educate the community about smoking in the movies (not including paid media).
  - What strategy have you used most often?
  - What factors have determined which community education approach you have used most often?
- How successful have these efforts been at educating the community about smoking in the movies? How do you judge the success of an activity?

- Are there any lessons learned from your efforts to educate the community about smoking in the movies that you would like to share?

CAT data show that Youth Partners worked to reduce the influence of smoking in the movies primarily by conducting community education and advocacy with organizations (Exhibit 6-9). Community education activities included having smoke-free movie nights (often with presentations and question-and-answer sessions); getting youth and adult signatures on postcards or letters to MPAA requesting that movies with smoking require an R rating; and sponsoring Reality Check events at which youth spread the smoke-free movie message, such as a Battle of the Bands or bowling event with signs, announcements, handouts, and Reality Check gear giveaways.

Exhibit 6-9. Youth Partner Strategies Related to Promoting Smoke-Free Movies, CAT System, January 2005–April 2006



Advocacy activities included sending postcards to the president of MPAA requesting that movies with smoking or tobacco product placement require an R rating and seeking resolutions about smoking in movies from schools, parent groups, and community organizations. The spike in activities that occurred in February 2005 and February 2006 (Exhibit 6-9) relates to the International Day of Action, which is an earned media event focused on getting smoking and tobacco product placement out of youth-rated movies and involves many U.S. states, national organizations, and foreign countries. Reports from CAT showed that Partners sent 9,592 postcards to MPAA from January 2005 to April 2006. During that same period, Youth Partners reported conducting 192 smoke-free movie nights

and 113 community events focused on disseminating information about smoking in the movies. Finally, Partners reported getting 28 smoke-free movie resolutions adopted by PTAs, school boards, schools, community organizations, town supervisors, and health care coalitions. The purpose of the resolutions is to demonstrate widespread support for the "R" rating and focus additional pressure on the MPAA to adopt the "R" rating.

Newspaper articles were published about International Day of Action activities. In late February and early March 2006, 22 news articles and 4 letters to the editor detailed the issue of smoking in the movies and described events and advocacy efforts designed to raise awareness and gain support and signatures for postcards being sent to MPAA. In addition, there were 23 instances of related earned media where Youth Partner events were discussed on radio and television during this period. Overall, there were very few (5) paid media strategies (approximately $5,000 of ads in local newspapers) by the Youth Partners, complemented by $10,000 of print ads in the New York Times and other large papers.

6.4.2 Opportunities and Challenges in Promoting Smoke-Free Movies

Interviews with Partners confirmed that collecting postcards and letters to send to MPAA was a major component of their smoke-free movie efforts, and they even provided postcards for signatures at events that focused on other advertising, sponsorship, and promotion issues. To educate youth about the issue of smoking in the movies, Youth Partners prepared tobacco-themed games for community events, distributed materials, involved youth in smoke-free movie nights, and made presentations in school and other settings. Incentives were often used to attract teen participation, such as T-shirts that read "Movies sell smoking; smoking doesn't sell movies."

When describing criteria for successful efforts, Reality Check coordinators focused on factors that might affect level of involvement in program activities rather than on program characteristics that might increase awareness or change attitudes. Coordinators said they prefer to approach the issue of smoking in the movies through efforts that involve Reality Check youth in fun activities, target additional youth, use previously successful activities, and are at locations with a large audience. They felt that successful activities were those that kept youth involved and interested and also resulted in a high number of signatures collected or amount of materials handed out.

6.4.3 Trends in Smoke-Free Movie Program Outcomes

To measure the progress of short-term outcomes that may respond to the smoke-free movie initiative, we included the following belief outcomes from ATS that have been asked consistently from Q4 2003 to Q4 2005:

- Movies rated G, PG, and PG-13 should <u>not</u> show actors smoking.
- Actors smoking in the movies does <u>not</u> encourage smoking among teens.

Exhibit 6-10 shows that an increasing percentage (from 68% in 2003 to 79% in 2006) of New Yorkers agree that movies rated G, PG, and PG-13 should not show actors smoking. This increase is also apparent among smokers (from 55% to 64%) (Exhibit 6-11). An increasing percentage of New Yorkers also agree that actors smoking in the movies encourages smoking among teens, but the increase in the past 2 years has been slight (Exhibit 6-12).

Exhibit 6-10. Percentage of Adults Who Agree that Movies Rated G, PG, and PG-13 Should Not Show Actors Smoking, ATS Q4 2003–Q1 2006

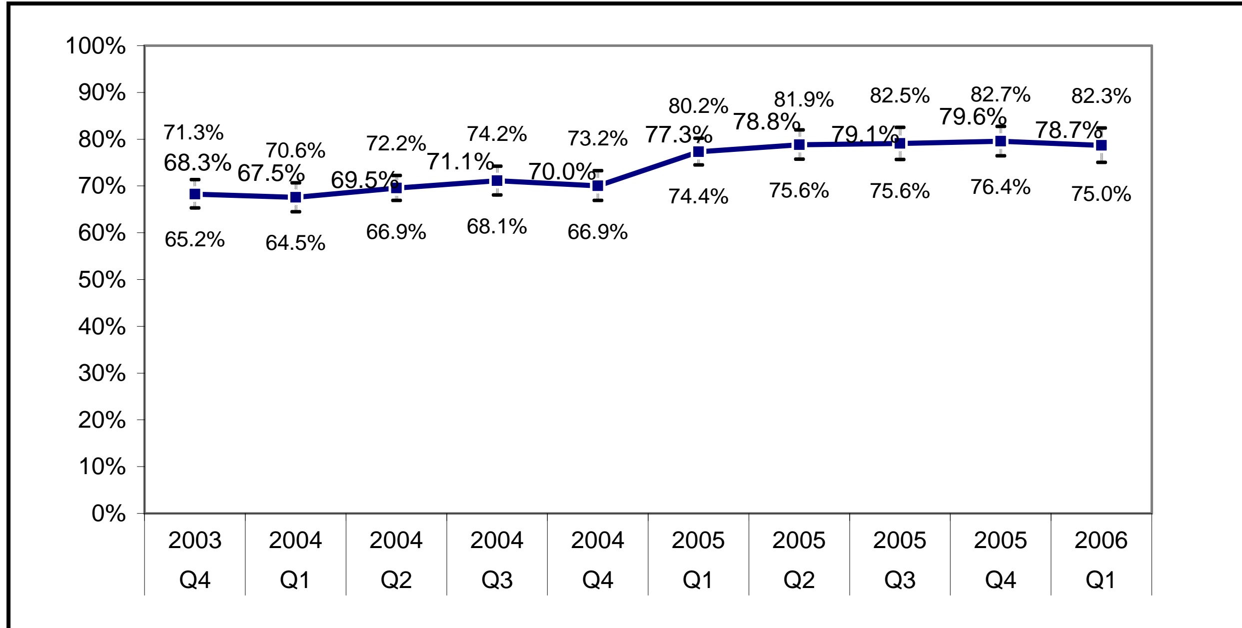


Exhibit 6-11. Percentage of Adult Smokers Who Agree that Movies Rated G, PG, and PG-13 Should Not Show Actors Smoking, ATS Q4 2003–Q1 2006

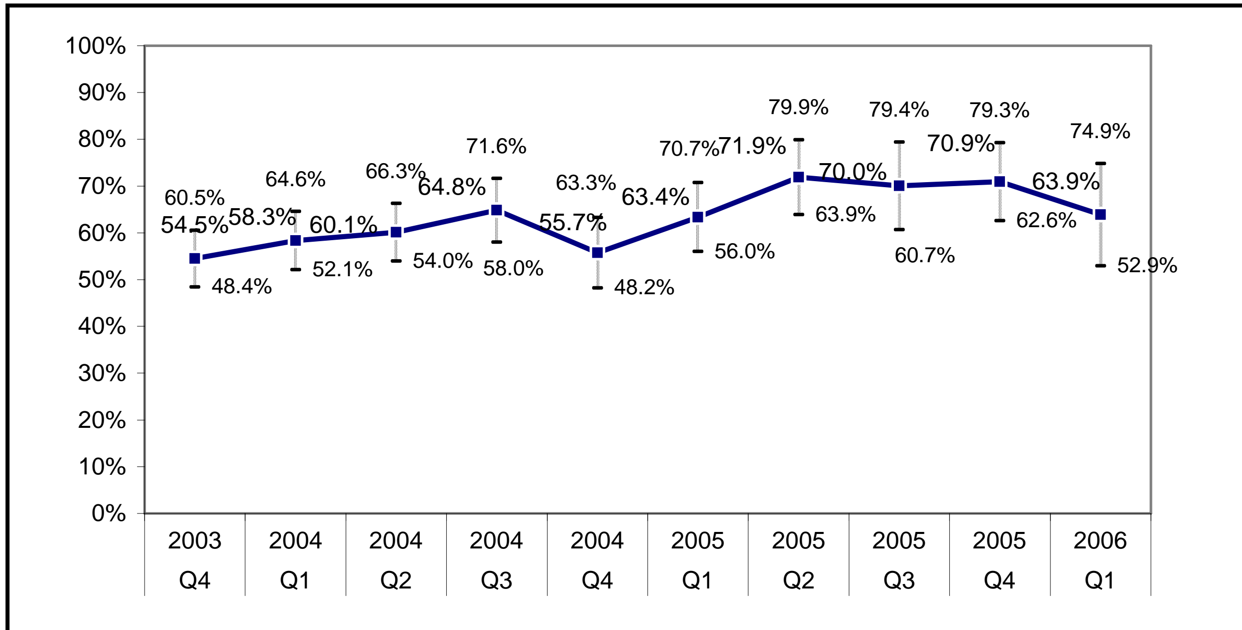
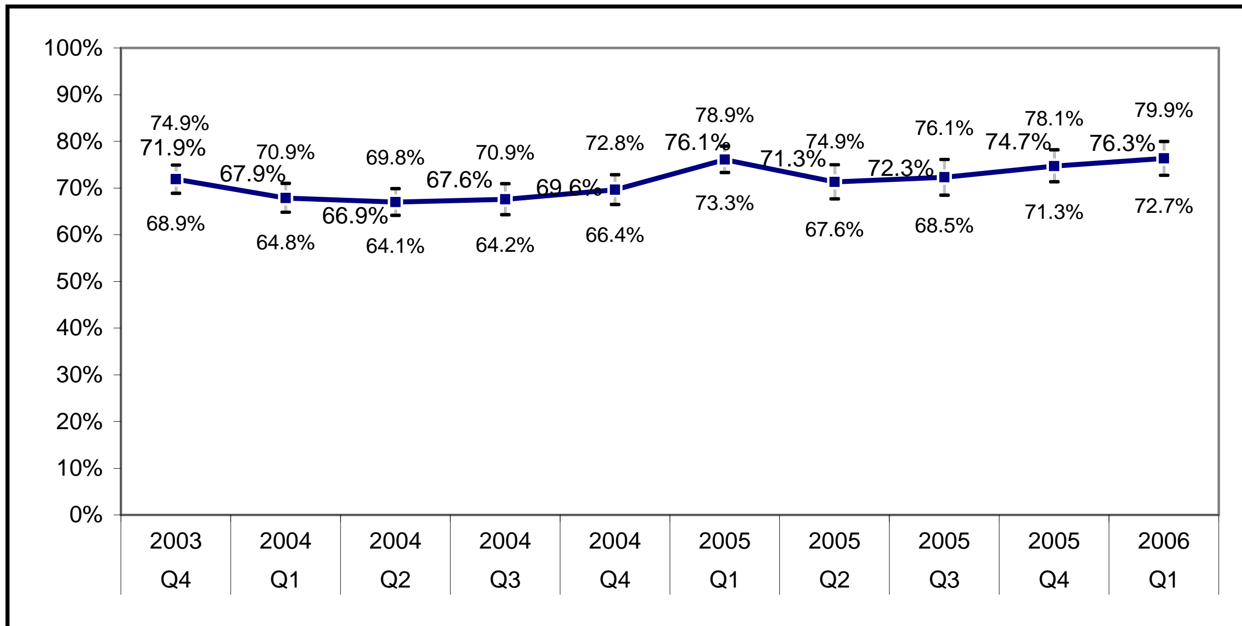


Exhibit 6-12. Percentage of Adults Who Agree that Actors Smoking in the Movies Encourages Smoking among Teens, ATS Q4 2003–Q1 2006



6.4.4 Youth Smoking in New York and Exposure to Smoking in the Movies

To investigate whether exposure to smoking in the movies is associated with smoking among New York youth, we analyzed data from the baseline New York Longitudinal Youth Tobacco Evaluation Survey (NY-LYTES), conducted in spring 2005 (N = 1,511). Following the methodology of Dalton et al. (2003), the survey asked youth whether they had seen each of 30 popular movies rated for the amount of smoking they contained on a scale of 1 (lowest) to 4 (highest). Based on these ratings, we created the Smoking in the Movies Exposure Index, which is calculated by multiplying a movie's smoking rating by a number that indicates whether an individual has never seen the movie (0), has seen the movie only once (1), or has seen it more than once (2) and then summing this score across all 30 movies. To simplify analysis, youth were then classified into four quartiles of exposure. Exhibit 6-13 confirms the relationship shown in the recent national study—that the prevalence of ever smoking and current smoking is associated with exposure to smoking in the movies. We also found that parents can effectively curb youth's exposure to smoking in the movies by limiting how frequently youth view movies rated R. Exhibit 6-14 illustrates that 31% of youth in the highest-exposure quartile reported that their parents let them view R-rated movies "all the time" compared with only 7% in the lowest-exposure quartile. In contrast, only 1% of youth in the highest-exposure quartile and 29% of youth in the lowest-exposure quartile reported that their parents never let them watch R-rated movies.

Exhibit 6-13. Percentage of Youth Who Ever Smoked and Are Current Smokers, by Smoking in the Movies Exposure Index, New York Longitudinal Youth Tobacco Evaluation Baseline Survey

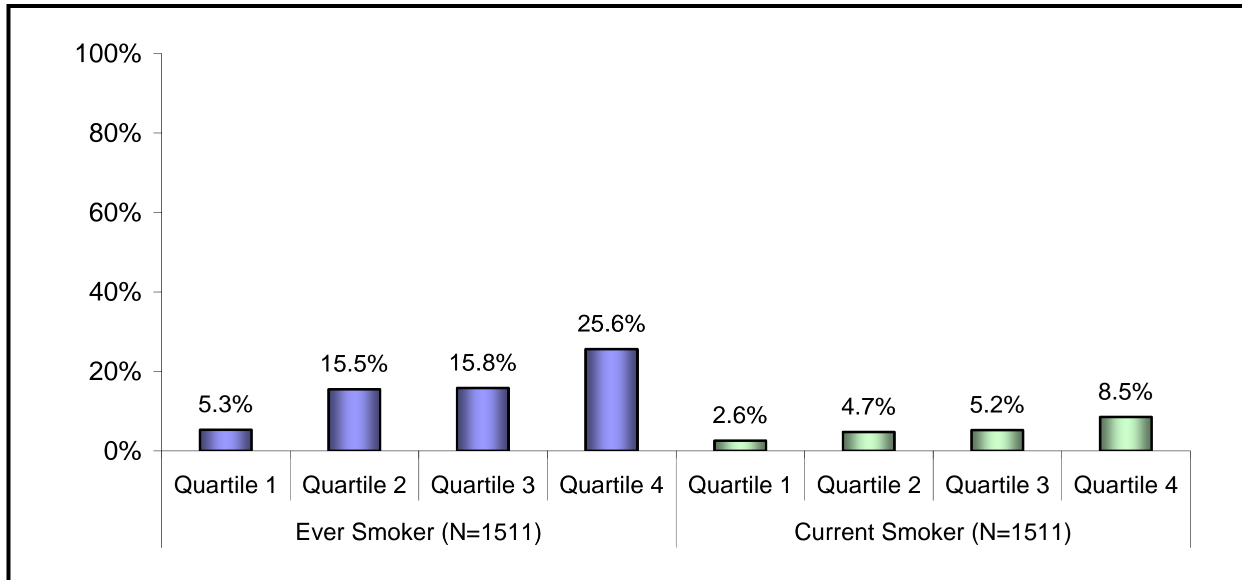
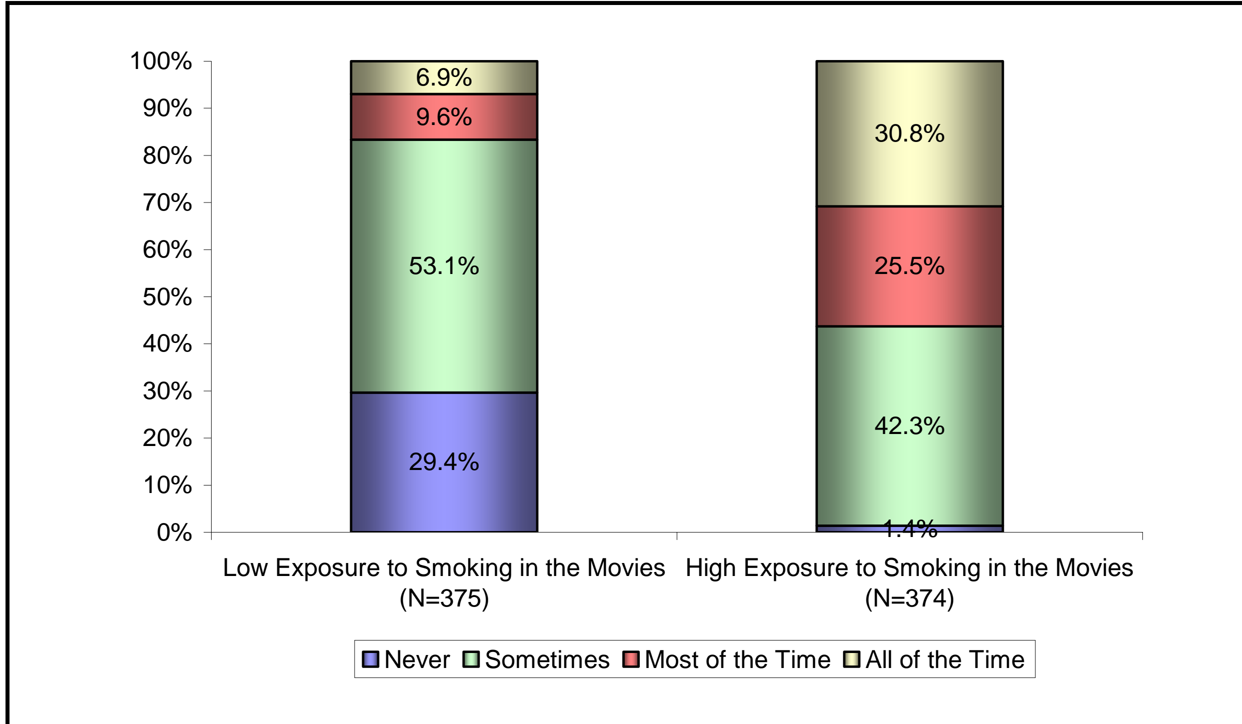


Exhibit 6-14. Percentage of Youth Who Reported that Their Parents Let Them Watch R-Rated Movies/Videos "All the Time," "Most of the Time," "Sometimes," and "Never," by Smoking in the Movies Exposure Index, New York Longitudinal Youth Tobacco Evaluation Baseline Survey



6.4.5 Programmatic Implications

The data we have assembled indicate that Youth Partners are working to limit youth's exposure to smoking in the movies by advocating for policy changes at the national level (i.e., Hollywood) and to raise awareness of this issue. It is difficult to measure whether efforts to influence MPAA are having their intended effect. At a minimum, these activities support and lend credibility to other national efforts supported by the American Legacy Foundation and the Campaign for Tobacco-Free Kids aimed at influencing MPAA policy. As with the issue of exposure to SHS in public places, reducing exposure to smoking in the movies involves changing social norms. In the past 15 years, there has been a dramatic shift in the percentage of the population in New York and in the United States that lives in a community where smoking is banned in most public places. Over this period, social norms and public policy have shifted. Policy change in Hollywood may follow that same gradual shift or may shift abruptly in response to attention to the issue of smoking in the movies. In general, it is difficult to associate diffuse community-based education and advocacy efforts with population-level change or discrete policy change. As a result, the program aims to focus Youth Partners on achieving short-term impacts, such as sending postcards to the

MPAA and obtaining smoke-free movie resolutions from PTAs, school boards, schools, and community organizations. Although the CAT data show that nearly 10,000 postcards were sent to the MPAA and at least 28 resolutions were adopted, interviews with Youth Partner coordinators indicate that they may not be sufficiently focused on activities that have an impact. They indicated that they prefer to approach the issue of smoking in the movies through efforts that involve Reality Check youth in fun activities and consider activities successful if they keep youth involved and interested. While it is important to engage youth, the goal is to engage youth who will become advocates for policy change.

However, we can measure shifts in shorter-term outcomes over time, such as beliefs regarding smoking in the movies in New York. The first measure shows a relatively sizeable increase in the percentage of adults overall (68% to 79%) and smokers (55% to 64%) in New York who believe that G, PG, and PG-13 should not show actors smoking. There was also a slight, but statistically significant, increase in the percentage of adults who agree that smoking in the movies encourages youth to smoke. However, it is difficult with the available data to establish a clear link between these changes and NYTCP-sponsored efforts to promote smoke-free movies. Because a limited amount of mass media has focused on smoke-free movie messages, the percentage of the population that has been exposed to the program's key messages is likely very small.

If no additional funds are available for Youth Partners, we recommend that NYTCP focus Youth Partners' smoke-free movie initiative efforts on advocacy for policy change. If additional resources can be focused on this effort, we recommend additional investment in paid advertisements aimed at changing social norms consistent with the objective of increasing the percentage of adults who agree that movies rated G, PG, and PG-13 should not show actors smoking. We suggest that these ads be aired in movie theaters before movies that contain smoking and through other mass media to ensure that a greater proportion of adults are more frequently exposed to the program's message. Our findings, and those of others (e.g., Sargent et al., 2005) suggest that, if parents of adolescents limit the number of R-rated movies their children see, parents can reduce their children's exposure to smoking images. The success of this initiative over time will likely depend on a variety of strategies implemented by an array of organizations, states, and nations, of which the NYTCP Youth Partners will be a component.

6.5 Tobacco Advertisement-Free Magazines Initiative

Although the 1998 Master Settlement Agreement (MSA) prohibited cigarette companies from targeting youth, research has shown that youth continue to be exposed to a significant amount of advertising, particularly in magazines (Hamilton et al., 2002; King and Siegel, 2001). For example, King and Siegel (2001) examined trends in cigarette advertising in youth-oriented magazines before and after the MSA. They defined youth-oriented magazines as those with at least 15% youth (i.e., 12 to 17 years old) readership or at least

2 million youth readers. They found that inflation-adjusted expenditures for youth brands (smoked by at least 5% of youth) in youth-oriented magazines were $59 million in 1998, $67 million in 1999, and $60 million in 2000. In 2000, King and Siegel estimated that magazine advertisements reached more than 80% of youth an average of 17 times.

A recent systematic review assessed whether there is a causal link between exposure to tobacco promotion and youth smoking initiation (DiFranza et al., 2006). The authors found that tobacco promotions foster positive attitudes, beliefs, and expectations regarding tobacco use. This study found that youth are exposed to tobacco promotions before smoking initiation and that there is a dose-response relationship between the amount of exposure and the risk of smoking initiation. They concluded that "causality is the only plausible scientific explanation for the observed data."

The baseline NY-LYTES shows that 57% of youth reported seeing or hearing cigarette advertising or promotions in the past 30 days in 2005. Evidence shows that tobacco promotion increases the risk of youth smoking, and youth exposure to tobacco promotions continues to be high. One of NYTCP's programmatic objectives focuses on limiting this exposure by increasing the number of magazines and newspapers that have a written policy prohibiting acceptance of tobacco company or product advertising.

As noted in the 2005 IER, Youth Partners conducted a statewide survey of 223 middle and high schools in New York in fall 2004. This survey found that more than 70% of the school libraries had copies of *Time*, *People*, *Sports Illustrated*, or *Newsweek* that contained cigarette advertising. In a June 2005 press release, Attorney General Eliot Spitzer announced an agreement between the National Association of Attorneys General (NAAG) and Time, Inc., and Newsweek to eliminate tobacco advertising in school editions of *Time*, *People*, *Sports Illustrated*, and *Newsweek*. In this press release, Spitzer acknowledged the efforts of Youth Partners and their work highlighting the extent of youth exposure to cigarette advertising in magazines in schools.

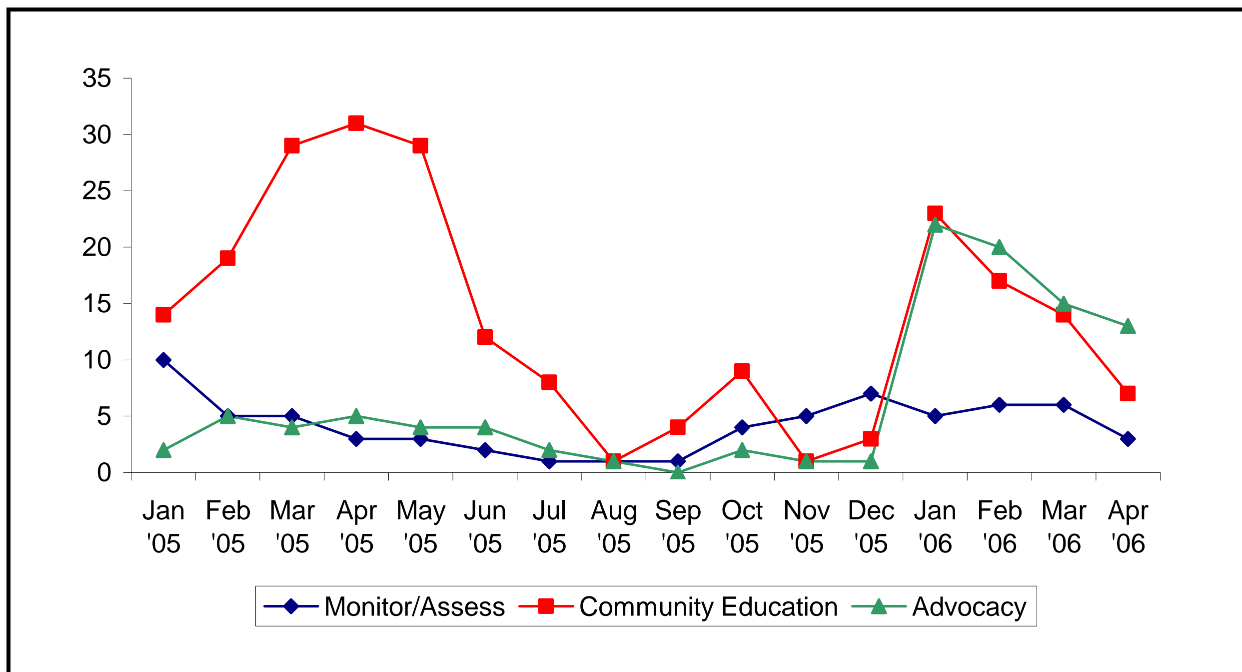
In this section, we describe programmatic efforts to reduce youth exposure to tobacco advertising and assess NYTCP's progress toward this objective since the 2005 IER.

6.5.1 Programmatic Efforts to Promote Tobacco Advertisement-Free Magazines

CAT data show that Youth Partners worked to reduce tobacco ads in magazines through community education and advocacy and collected data on the percentage of schools with magazines that contain tobacco advertising. Youth Partner activities focused primarily on magazines in the school setting, and their advocacy strategies primarily targeted obtaining resolutions from school boards and schools, which could be shared with the magazine publishers and the New York Office of the Attorney General (OAG) to show support for further reductions in tobacco advertisements in magazines. They also worked to educate

school librarians about the NAAG agreement. The Youth Partners surveyed schools in fall 2004, fall 2005, and spring 2006 to monitor the percentage of schools with magazines that contain tobacco advertising and to monitor the implementation of the NAAG agreement. The findings from these surveys were shared with magazine publishers and the OAG. In addition, Partners advocated with school PTAs for resolutions. Partners also wrote articles for school and community newspapers about the issue; shared facts sheets with school staff; and conducted a subscription card drive, in which Reality Check youth put antitobacco stickers on subscription cards from magazines and mailed them back to the publishers. As shown in Exhibit 6-15, Youth Partners have used community education approaches most often, but they have increased their number of advocacy strategies. A close review of the community education strategies suggests that these efforts were targeted to school settings, and many could have also been classified as advocacy rather than community education.

Exhibit 6-15. Youth Partner Strategies Related to Promoting Tobacco Advertisement-Free Magazines, CAT System, January 2005–April 2006



Youth Partners reported 33 instances of passing resolutions or instigating organizational practice changes, representing change in more than half of all Youth Partner advocating strategies in this focus area. Resolutions were passed by schools, school boards, and physicians' offices.

6.5.2 Opportunities and Challenges in Promoting Tobacco Advertisement-Free Magazines

Two factors that Youth Partners cited as having helped them promote tobacco advertisement-free magazines were effective presentations to school boards by youth and strong support on the issue from school staff and health care providers. Barriers encountered included the time and complexity involved in setting up meetings and presentations with school boards and health care providers. Some librarians also raised concerns that removing ads may be a form of censorship. Other challenges included trying to make progress in schools that did not host Reality Check groups and the fact that librarians cannot take policy action on their own without school or board approval. Finally, involved youth quickly tire of attending long school board meetings.

6.5.3 Trends in Tobacco Advertisement-Free Magazine Program Outcomes

The Youth Partner follow-up survey of school libraries in fall 2005 indicated that most school libraries were not yet receiving tobacco advertising-free editions of *Time*, *People*, *Sports Illustrated*, and *Newsweek.* In response to this finding, NYTCP and Youth Partners made a concerted effort to advocate with the Attorney General and the publishers to ensure that the NAAG agreement was being implemented and with school librarians to report to the Attorney General and the publishers specific instances of failure to comply with the agreement. To assess the impact of their efforts, Youth Partners conducted a third survey of school libraries in May and June 2006. While all of the data have not yet been tabulated, of the 134 surveys of middle and high schools that have been received to date, only 29% (39/134) now have versions of *Time*, *People*, *Sports Illustrated*, or *Newsweek* that contain tobacco advertising. This suggests that the Youth Partners' advocacy efforts have translated into more effective implementation of the agreement and fewer students being exposed to cigarette advertisements in magazines in schools.

6.5.4 Programmatic Implications

Youth Partners' advocacy efforts have led to an increase in the number of schools that carry the tobacco advertisement–free versions of *Time*, *People*, *Sports Illustrated*, and *Newsweek*. Although it is difficult to quantify how this policy change has decreased youth's total exposure to cigarette advertising, it is likely that the policy has had a positive effect on their exposure to cigarette advertising in schools. The CAT system data indicate that from January 2005 to April 2006, Youth Partners have shifted their emphasis away from community education toward advocacy. Our review of Youth Partners' work plans for the next fiscal year is consistent with this trend as it indicates that Youth Partners are increasingly focusing on promoting tobacco advertisement-free editions of magazines in schools and other settings. This increased focus on advocacy is a sensible shift in emphasis. While it is important to educate the broader community about the influence of cigarette advertising on youth smoking, the Youth Partners can have their largest impact on this

objective by advocating with school librarians and schools boards. Resolutions from school boards are intended to put pressure on the Attorney General and publishers to omit tobacco advertisements from magazines sent to schools.

7. CONCLUSIONS AND RECOMMENDATIONS

Over the past 3 years, the New York Tobacco Control Program (NYTCP) has steadily increased its capacity to develop and implement evidence-based tobacco control interventions. Generally speaking, the new initiatives are on course to date. Despite this progress, the program has not reached its full potential because of cumbersome bureaucratic procedures that interrupt the continuity of the program's interventions and impede coordination across complementary interventions. These impediments, combined with average funding levels and the lack of policy interventions in 2004, contributed to a lack of decline in smoking prevalence in 2005 in New York similar to the lack of decline in the United States as a whole. Previous policy changes, such as cigarette excise tax increases in 2000 and 2002 and the Clean Indoor Air Act (CIAA) in 2003, likely contributed to lower prevalence in 2004, but their effect wanes over time.

Thanks to a doubling of program funding effective April 1, 2006, the program is poised to have a significant effect on public health by expanding the reach and intensity of its evidence-based interventions. However, these will need to be coupled with new policy interventions, ongoing effective media, and continuous programming. In the 2005 Independent Evaluation Report (IER), we recommended that the program

- increase investment in evidence-based media to consistently reach a minimum of 60% awareness among New York adults;
- increase resources for the New York State Smokers' Quitline to
  - accommodate increases in demand from increased use of effective media, and
  - provide additional nicotine replacement therapy (NRT) starter kits;
- increase cessation funding to address key programmatic gaps; and
- increase efforts to promote smoke-free homes and cars in households with smokers.

NYTCP has acted decisively to implement plans to address the first three major recommendations above. However, if the past is any indication, it will be extremely difficult for the program to deploy these additional resources in the current fiscal year. The program's early attempts to expand existing contracts to deliver interventions to more New Yorkers have been stymied by the state approval process, making it nearly impossible for the program to fully realize the potential represented by the increase in funding.

In this report, we provide clear examples of how highly bureaucratic contract procedures have translated into unnecessary interruptions in the provision of effective interventions to New Yorkers. The first example comes from the program's tobacco countermarketing efforts. In the 2005 IER, we praised the program for developing and implementing a countermarketing plan that called for high impact ads. We demonstrated that these efforts

had a significant effect on program outcomes and that emotional ads with intense images generate more favorable reactions among New Yorkers than ads without these features. Unfortunately, the New York State Department of Health's (NYSDOH's) countermarketing efforts were minimal from August 2005 through late May 2006, limited in large part to campaigns totaling $6 million, implemented by NYTCP Community Partnerships. This gap in countermarketing was due to the failure of NYSDOH to approve a countermarketing plan in spring 2006 and to respond to NYTCP's requests for additional financial resources to implement mass media efforts.

As a result of the inconsistently implemented countermarketing efforts at the state level, there were dramatic swings in the number of calls to the New York State Smokers' Quitline—from a low of 3,000 calls in September 2005 to a high of 26,000 calls in January 2006. This large fluctuation is consistent with our analysis, suggesting that call volume was five times higher with the program's countermarketing efforts than it would have been in its absence. So while there is a clear link between the program's countermarketing efforts and calls to the Quitline and other program outcomes, the failure to fully implement these efforts negatively impacts public health. As a result of the gaps in state mass media efforts, the program failed to achieve the 2005 IER recommendation to reach 60% of adults with televised countermarketing messages.

During spikes in call volume associated with increased media expenditures, a significant percentage of Quitline callers hung up while waiting to speak to a Quitline specialist. More active coordination between the countermarketing efforts of NYSDOH and Community Partnerships and the Quitline is needed to ensure that the Quitline can anticipate increases in call volume and staff the Quitline appropriately. For such coordination to occur, NYTCP's media plans need to be approved in a timely manner and Community Partnerships need to collaborate and coordinate to ensure that the Quitline is not promoted beyond its capacity to provide quality service.

The second example involves an unnecessary several-month delay in contract renewals for the Community Partners. The delays in the Community Partners' contracts led to a general slowdown in their efforts in the period between the end date of one contract year and the execution date of the next contract. The Community Activity Tracking (CAT) system provides a monthly accounting of Community Partner activities and shows a clear slowdown from August through October 2005. Activities that involved cash outlays beyond salaries (e.g., mass media) were particularly affected during this period because the organizations that serve as the fiscal agents of the Community Partners cannot afford to expend resources for which they cannot be reimbursed.

Such lapses are disruptive to the Partners' work because they lead to staff turnover, low morale, and inefficient use of resources. The evidence base in tobacco control supports a comprehensive approach, including coordination across interventions. Bureaucratic

constraints hinder this coordination and reduce the effectiveness of NYTCP's efforts. Greater coordination than the current bureaucratic system appears to be capable of producing is needed to enhance NYTCP's effectiveness. We recommend that NYSDOH and the state contract system allow and use multiyear contracts. Multiyear contracts would allow planning and coordination between NYTCP and Partners and provide greater stability to funded organizations over time without reducing accountability.

Despite the barriers noted above, there have been a number of programmatic successes. The Cessation Centers have successfully built their capacity in the past year and have steadily increased their efforts to promote cessation in health care settings. Although it is premature to conclude that the Cessation Centers' efforts have had an impact on the percentage of smokers statewide that are screened and counseled about their tobacco use, the available evidence suggests that they are on track to have an impact. While awareness of key NYTCP-funded cessation resources and knowledge of tobacco dependence treatment are low among health care providers, the Cessation Centers efforts are focused on correcting these deficits and promoting systems that will cue providers to screen for tobacco use and provide brief counseling to smokers.

With respect to community-based interventions, the evidence of impact is less clear. However, it should be noted that it is challenging to evaluate the impact of diffuse community interventions. Sporadic efforts to promote smoke-free homes have not had an impact on the prevalence of smoke-free homes statewide, especially among households with a smoker. Aside from mass media, there are not proven interventions that Community Partners can implement to promote smoke-free homes. Although the program has aired SHS messages in the past, New Yorkers' awareness of these messages has been fairly low and there have been multiple objectives for the messages from promoting the CIAA, general messages about the dangers of SHS, and reducing children's exposure to SHS. To increase the likelihood of having an impact, we recommend focusing the content of SHS mass media messages on the dangers of exposure to SHS and including a call to action for smokers to ban smoking in their homes. The Community Guide recommends using mass media in combination with other interventions to reduce tobacco use. Although this recommendation does not explicitly indicate that mass media is effective for promoting smoke-free homes, we believe that it is reasonable to conclude that mass media is effective at changing other tobacco-related health behaviors. Our own research supports this assertion (Evans et al., 2005). For families with children, we suggest the successful approach used in Vermont to "create a smoke-free zone around your children." We suggest that NYTCP run these media messages in once-a-year campaigns.

Turning to the program's Advertising, Sponsorship, and Promotion initiatives, it is generally too early to assess effectiveness. With respect to reducing the amount of cigarette advertising among tobacco retailers, the baseline data demonstrate that cigarette advertising is pervasive, and interviews with Community Partnerships suggest that their

early efforts to intervene with tobacco retailers have met with significant resistance and modest success. We recommend that the Community Partners focus their efforts on advocacy with large grocery stores and pharmacies that rely less on cigarette sales as a major source of revenue. As a result, they may be more receptive to reducing the amount of cigarette advertising they display in their stores and may provide needed momentum to reduce advertising among other tobacco retail outlets.

With respect to efforts to promote smoke-free movies, it is difficult to measure whether efforts to influence MPAA are having their intended effect. Our findings confirm national studies—that exposure to smoking in the movies is associated with increased smoking among youth. However, as with the issue of exposure to SHS in public places, reducing exposure to smoking in the movies involves changing social norms and dramatic policy changes. In general, it is difficult to associate diffuse community-based education and advocacy efforts to population-level change or discrete policy change. Because a limited amount of mass media has focused on smoke-free movie messages, the percentage of the population that has been exposed to the program's key messages is likely very small. We recommend that NYTCP focus Youth Partners' smoke-free movie initiative efforts on advocacy for policy change rather than on broad-based community education. Influencing the MPAA may require focused strategic interventions, coupled with efforts to demonstrate popular support for policy change.

Finally, in the area of tobacco-free magazines, the Youth Partners have successfully advocated for reducing youth exposure to cigarette advertising in popular magazines. Early results indicate that the percentage of schools that carry versions of *Time*, *People*, *Sports Illustrated*, or *Newsweek* that contain cigarette advertising has decreased markedly from fall 2004 to spring 2006 as a direct result of the Partners' efforts. We recommend that the Youth Partners expand the number of magazines that are covered by the arrangement.

In summary, we make the following recommendations:

- Avoid unplanned gaps in media implementation to maximize coordination between NYSDOH and Community Partners and the Quitline.
  - Ensure that the Quitline can anticipate increases in call volume due to countermarketing efforts and staff the Quitline appropriately.
- Dedicate a sufficient amount of the newly available program resources to achieve 60% awareness of media messages among New Yorkers.
- Maximize the efficiency of mass media efforts to promote the Quitline by increasing the use of cost-effective media (e.g., print and radio).
- More actively promote smoke-free homes and cars through the use of mass media that includes a call to action to limit smoking in homes and cars.
  - Include a call to action to smokers in mass media messages to ban smoke in their home.

  - Dedicate a time of the year to concentrate efforts to promote smoke-free homes and cars (e.g., back to school time).

- Focus advocacy efforts to reduce cigarette advertising and promotions on large grocery stores and pharmacies that rely less on cigarette sales as a major source of revenue.
- Avoid gaps in Community Partner activities associated with annual contract renewals.

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