Independent Evaluation of the New Jersey Comprehensive Tobacco Control Program

Annual Update

CTCP
NEW JERSEY
Comprehensive Tobacco Control Program

Prepared for

James E. McGreevey
Governor

Clifton R. Lacy, M.D.
Commissioner

May 2003

Acknowledgements

The New Jersey Comprehensive Tobacco Control Program (CTCP) is operated by the New Jersey Department of Health and Senior Services (DHSS) under the direction of Commissioner Clifton R. Lacy, M.D. The CTCP is administratively located within the Division of Addiction Services. This report was prepared for DHSS by the University of Medicine & Dentistry of New Jersey-School of Public Health through funding from the Master Settlement Agreement. The interpretations of data, conclusions and recommendations expressed in this report are those of the authors and may or may not represent the views of DHSS.

UMDNJ-School of Public Health

Cristine Delnevo, PhD, MPH, Principal Investigator
George Rhoads, MD, MPH, Co-Principal Investigator
Diane Abatemarco, PhD, MSW, Co-Principal Investigator
Ira Kaufman, MS, Co-Investigator
M. Jane Lewis, DrPH, Co-Investigator
Omowumni Y.O. Osinubi, MD, MSc, FRCA, Co-Investigator
Wendy Ritch, MA, MTS, Co-Investigator

Contributing Staff

Karen Benjamin, MPH
Megan Brown, MPH
Jamie Bussel, MPH
Mary Hrywna, MPH
Shyamala Muthurajah, MPH
Edmond S. Malka, MPH
Mona Shah, MPH
Dorota Staniewska, MS
Spiro Yulis, MHS

We would like to acknowledge the valuable assistance of:

Hallman and Associates
Mathematica Policy Research, Inc.
New Jersey Department of Education
New Jersey Department of Health and Senior Services
Office on Smoking and Health, Centers for Disease Control and Prevention

We extend our deepest gratitude to Dr. John Slade (1949-2002), a true leader whose vision and commitment will continue to inspire our work.

Suggested Citation (full report)

Delnevo CD, Hrywna M, Lewis MJ, Osinubi OYO, Ritch WA, Abatemarco DJ, Kaufman I, Malka ES. Independent evaluation of the New Jersey Comprehensive Tobacco Control Program: Annual Update for the New Jersey Department of Health and Senior Services. New Brunswick, NJ: University of Medicine & Dentistry of New Jersey-School of Public Health; May 2003.

Acknowledgements 2

Executive Summary 7

Decreasing Initiation of Tobacco Use among Youth and Young Adults 7
Increasing the Number of Tobacco Users Who Initiate Cessation 10
Decreasing Exposure to ETS 12
Decreasing the Acceptance of Tobacco 14
CTCP Benchmarks 15

Introduction 18

Methodology 19

Overview 19
New Jersey Youth Tobacco Survey (NJYTS) 19
New Jersey Adult Tobacco Survey (NJATS) 19
New Jersey School Health Education Profiles (NJSHEP) 20
New Jersey Workplace Tobacco Survey (NJWTS) 20
New Jersey Eating and Drinking Establishment Tobacco Survey (NJEDTS) 20
Media Tracking Study 20
Process Evaluation Project (PEP) 21

Section 1: Decreasing Smoking Initiation Among Youth and Young Adults 23

Community and Youth Mobilization 23
Media and Countermarketing 23
Awareness of Anti-tobacco Promotional Efforts 23
Minor Access to Tobacco 24
Lifetime Use of Tobacco Products 24
Age of Initiation 25
Current Use of Cigarettes 26

Section 2: Increasing the Number of Youth and Adult Tobacco Users Who Initiate Treatment 29

Nicotine Dependence Treatment Services 29
Community and Media Efforts 29
Awareness of Media Efforts 29
Utilization of Quit Services 30

Section 2: (continued)

Barriers to Quitting 31
Indicators of Nicotine Dependence 32
Clinician Counseling for Tobacco Cessation 33
Intention to Quit 34
Quit Attempts 34
Method of Cessation 35
Quit Successes 35
Prevalence of Cigarette Smoking 36

Section 3: Decreasing Exposure to Environmental Tobacco Smoke 39

Community Mobilization 39
Attitudes Towards ETS 40
ETS at School 41
ETS at Work 41
ETS at Eating and Drinking Establishments 43
ETS at Home 44

Section 4: Decreasing the Acceptability of Tobacco Use 47

Community Mobilization 47
Anti-tobacco Media Efforts 47
Attitudes Toward Tobacco Industry Practices 48
Pro-tobacco Advertising and Promotions 49
Newspaper Coverage of Tobacco Control 50

Recommendations 52

Glossary

Abbreviations and Acronyms 55
Definitions of Key Measures 57

References 58

Appendix A: CTCP Logic Model with Evaluation Data Sources 63

Appendix B: Detailed Tables 64

LIST OF TABLES AND FIGURES

Figure 1	Prevalence of current cigarette use among 8th grade and high school youth in the US and New Jersey - National YRBS, 1991-2001; MTF, 1991-2001; NJYTS, 1999-2001	9
Figure 2	Prevalence of current cigarette use among adults in the US and New Jersey - BRFSS, 1990-2000	12
Figure 3	NJCTCP Progress Toward Suggested Tobacco Control Outcomes as of December 2001	15
Figure 4	Best Practices recommended funding for tobacco control in New Jersey compared to FY01/02 actual funding for CTCP	16
Figure 5	Non-compliance rate in New Jersey - TASE Enforcement Program, 1994-2001	24
Figure 6	Percentage of middle school students, high school students, and young adults who ever used tobacco, by type of product - NJYTS, 2001; NJATS, 2001	25
Figure 7	Age at which high school students first smoked a whole cigarette - NJYTS, 2001	26
Figure 8	Percentage of middle school students, high school students, and young adults who were current cigarette smokers, by race/ethnicity - NJYTS, 2001; NJATS, 2001	26
Figure 9	Percentage of adults who were current cigarette smokers, by age group - NJATS, 2001	27
Figure 10	NJQuitnet registrants, NJQuitline clients and NJQuitcenter clients, Oct. 2000-Dec. 2001	30
Figure 11	Racial/ethnic distribution of Quitline and Quitcenter clients vs. NJ Smokers - NJ Quitline & Quitcenter clients, 2001; NJATS, 2001	31
Figure 12	Reasons that keep adult smokers from quitting - NJATS, 2001	31
Figure 13	Indicators of nicotine dependence among adult and high school smokers NJATS, 2001; NJYTS, 2001	32
Figure 14	Physician assistance with quitting among adult smokers and recent quitters who visited a physician in the past 12 months - NJATS, 2001	33
Figure 15	Smokers' readiness to quit among high school students and adults - NJYTS, 2001; NJATS, 2001	34
Figure 16	Percentage of adults who attempted to quit during the 12 months preceeding the survey, by race/ethnicity- NJATS, 2001	35
Figure 17	Method used for quit attempts among adults who tried to quit during the 12 months preceeding the survey - NJATS, 2001	35
Figure 18	Percentage of adults who were current cigarette smokers, by gender and race/ethnicity - NJATS, 2001	36
Figure 19	Cumulative local ordinances on tobacco use/ETS exposure - NJGASP, 1993-2001	39
Figure 20	Reasons for having smoke-free homes by smoking status - NJATS, 2001	40

Figure 21	Percentage of adults who favor complete smoking ban in selected locations, by smoking status - NJATS, 2001	40
Figure 22	Smoking policies in workplaces - NJWTS, 2001	42
Figure 23	Smoking policies in eating and drinking establishments - NJEDTS, 2001	43
Figure 24	Percentage of middle and high school students who were exposed to environmental tobacco smoke by living with a smoker - NJYTS, 2001	45
Figure 25	Anti-tobacco ad awareness by age group - NJATS, 2001	48
Figure 26	Percentage of confirmed ads by sponsor - NJATS, 2001	48
Figure 27	Percentage of adults opposed to tobacco marketing practices, by smoking status - NJATS, 2001	49
Figure 28	Percentage of newspaper articles by CTCP initiative, Sept. 2000 - Dec. 2001	50
Figure 29	Newspaper articles by CTCP initiative, Sept. 2000 - Dec. 2001	51

Table 1	Percentage of New Jersey youth and young adults who ever and currently use cigarettes, by gender and race/ethnicity — New Jersey Youth Tobacco Survey, 2001; New Jersey Adult Tobacco Survey, 2001	64
Table 2	Percentage of adults who were current smokers, by gender, race/ethnicity, and age group— New Jersey Adult Tobacco Survey, 2000-2001	65
Table 3	Tobacco use policies in public schools, grades 6-12, by tobacco product, time, and location - New Jersey School Health Education Profiles, 2002	65
Table 4	Smoke-free policies in worksites, by size of workplace and type of industry, New Jersey Workplace Tobacco Survey, 2001; New Jersey Eating and Drinking Establishment Survey, 2001	66

EXECUTIVE SUMMARY

Since its inception in 2000, the Comprehensive Tobacco Control Program (CTCP) of the New Jersey Department of Health and Senior Services (DHSS) has incorporated the Centers for Disease Control and Prevention's (CDC) *Best Practices for Comprehensive Tobacco Control Programs*,[1] which is modeled after states with successful tobacco control programs such as California and Massachusetts. The combined elements of this approach, detailed in the CTCP logic model (see Appendix A), are designed to change the social norms around tobacco use. During 2001, the CTCP implemented a full range of statewide and local initiatives to reduce tobacco use. Detailed information on the state's program activities are found in the *New Jersey Comprehensive Tobacco Control Program 2001 Annual Report*.[2]

An important element of the CTCP is evaluation. Through evaluation activities, the CTCP gains valuable feedback and guidance to provide New Jersey with the most effective tobacco control agenda. This second evaluation report presents additional baseline measures of tobacco policies in New Jersey and provides the first comparative data on tobacco use among youth and adults. It is important to note any changes in estimates from these repeated measures should be interpreted with caution since trends cannot be inferred from what is currently only two points of data collection. The evaluation findings in this report identify areas of progress as well as challenges for the CTCP. The data in this report represent the time period from the program's inception, July 2000 through December 31, 2001. In the time taken to prepare the 2001 Annual Update, the CTCP continued to grow and expand. Thus, it is important to consider that this report is reflective of only the first 18 months of the program. Any comparisons with previously reported data should be made with consideration of timelines. A summary of the key findings based on the CTCP's goals is presented below.

Decreasing Initiation of Tobacco Use Among Youth and Young Adults

According to *Healthy New Jersey 2010*, the state's comprehensive set of health objectives for this decade, the goal is to reduce the percent of middle school and high school students who use cigarettes to 10% and 20%, respectively, by 2010.[3] To reach the 2010 target, the CTCP has undertaken a number of initiatives to promote anti-tobacco messages and prevent youth from smoking.

Community and Youth Mobilization Against Tobacco

In November 2000, the CTCP launched a grassroots, youth-led movement entitled REBEL *(Reaching Everyone By Exposing Lies)* and the movement has grown steadily. Twenty county-based chapters of REBEL operate throughout New Jersey. By the end of 2001, approximately 1,000 youth were active members of REBEL and approximately 4,000 New Jersey youth endorsed the movement. REBEL chapters conducted more than 600 local activities throughout the state during 2001.

Media and Counter Marketing

Studies suggest that the most effective anti-tobacco program is one that combines an aggressive media campaign with community or school-based interventions.[4-6] Launched in February 2001, *Not For Sale* is the theme

of New Jersey's first anti-tobacco advertising campaign introduced to support the REBEL movement. The youth anti-tobacco media campaign is intended to influence attitudes towards smoking and in turn, to prevent smoking initiation and reduce consumption. During 2001, the CTCP placed 454 television spots and 3234 radio spots to promote *Not For Sale*. Additionally, advertising spots appeared in over 300 schools and 250 movie theaters throughout the state during 2001.

Exposure to Anti-tobacco Media

In 2001, CTCP youth-focused media messages *(Not for Sale)* were explicitly linked to the REBEL movement. Based on the 2001 New Jersey Youth Tobacco Survey (NJYTS), which was conducted between October and December 2001, one third of students - 34.1% in middle school and 31.5% in high school - reported hearing of REBEL. More than half (56.1%) reported seeing or hearing "Not for Sale" media campaign messages.

Minor Access to Tobacco

Restricting minors' access to tobacco is also an important tobacco control strategy in delaying initiation among youth and reducing tobacco consumption. New Jersey's Tobacco Age of Sale (TASE) program, which aims to decrease the rate of illegal sales to minors, has consistently improved merchant compliance rates since 1994. As of October 1, 2001, 77.9%[i] of New Jersey's tobacco merchants were compliant with the TASE law. All states are required under the Federal Synar Amendment to increase merchant compliance to at least 80% by June 2003 or risk significant loss of federal block grant funding. The TASE program is making steady progress toward meeting the requirements of the Synar Amendment.

However, despite the consistent increase in merchant compliance, minors can still readily purchase cigarettes. The 2001 NJYTS found that 58.1% of current smokers in middle school and 65.4% of current smokers in high school reported not being refused a cigarette sale because of their age. These findings are unchanged since the 1999 NJYTS. A community needs only one noncompliant merchant for minors to gain access to tobacco.

Youth Initiation

Preventing initiation is critical to reducing smoking consumption and prevalence. In the 2001 NJYTS, 45.9% of high school students reported ever having smoked a *whole cigarette*, representing a 7.6% decline in smoking initiation rates from 1999 (49.7%). Although preventing initiation is best, delaying the age of smoking onset can also affect smoking consumption and prevalence. The earlier youth begin smoking, the more cigarettes they are likely to smoke per day and the less likely they are to quit.[7] Based on NJYTS data, the proportion of high school students in New Jersey who started smoking prior to the age of 13 decreased significantly from 21.6% in 1999 to 17.0% in 2001, a 21% decline. Efforts to prevent youth from smoking or to encourage those who have just begun to experiment to quit can lead to marked changes in smoking prevalence among youth and adults.

Current Use of Tobacco Among Youth

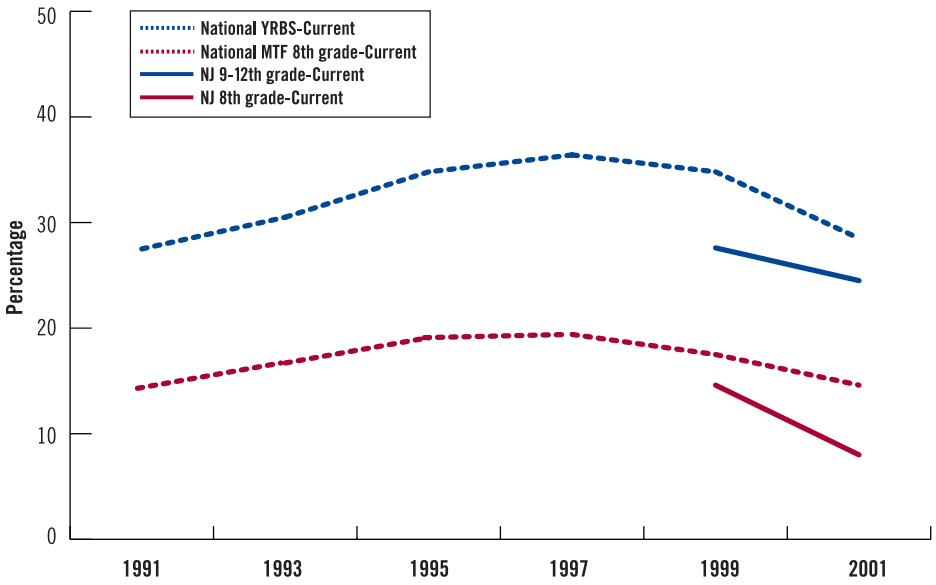
In the second year of CTCP efforts, the 2001 NJYTS demonstrated substantial reductions in tobacco use among middle and high school students. Decreases in ever and current use (i.e., use in 30 days preceding the

[i] The merchant compliance rate of 77.9% is based on the weighted state sample.

survey) of all tobacco products were documented for both middle and high school students since 1999.[8] Current cigarette smoking prevalence significantly declined among middle school students from 10.5% in 1999 to 6.1% in 2001, a 42% reduction. Current cigarette smoking prevalence among high school students fell from 27.6% in 1999 to 24.5% in 2001, an 11% decline. As previously mentioned, changes in prevalence estimates from 1999 to 2001 should be interpreted with caution and not unequivocally attributed to CTCP initiatives. With the CTCP still in its infancy, it is too early to determine whether these changes in prevalence will be sustained or what specifically influenced them.

Research has documented a decrease in youth smoking rates nationwide. As shown in Figure 1, cigarette smoking rates among high school students nationally declined by 18% from 1999 to 2001.[9] Comparing data from New Jersey to national data, the decline in smoking among high school students in New Jersey likely reflects nationwide trends in high school smoking prevalence. The decline in middle school smoking prevalence in New Jersey slightly exceeds the decline observed nationwide in the Monitoring the Future study.[10] Overall, the findings in New Jersey are consistent with national trends, where younger age groups are showing the biggest decline in tobacco use over the past few years. New Jersey is progressing in the right direction.

Figure 1: Prevalence of current cigarette use among 8th grade and high school youth in the US and New Jersey - National YRBS, 1991-2001; MTF, 1991-2001; NJYTS, 1999-2001



Cigarette Smoking Among Young Adults

Smoking among young adults (i.e., 18-24 year olds) in New Jersey has remained largely unchanged since 2000. In the 2001 New Jersey Adult Tobacco Survey (NJATS), which was conducted between September and December 2001, the prevalence of cigarette smoking continues to be higher among 18 to 24 year olds (27.2%) than any other age group. The high smoking rate among 18 to 24 year olds in New Jersey and nationwide is likely the result of both the aging of an adolescent cohort with high smoking rates and targeted marketing by the tobacco industry. [9,11] Despite having the highest smoking prevalence among all age groups, 18 to 24 year olds underutilized New Jersey's Quit services relative to other age groups in 2001.

College campuses provide an excellent opportunity to reach 18 to 24 year olds. Students who live in smoke-free dorms are 40% less likely to take up smoking than those in unrestricted housing.[12] Only 27% of US colleges prohibit smoking in students' dormitories and 40% of colleges do not offer smoking cessation programs to help students quit.[13] In October 2001, DHSS health officials issued a call-to-action to encourage college presidents to protect students from ETS exposure. Shortly thereafter, CTCP distributed the "Get Off Your Butts" information kits for colleges to encourage students to quit smoking and increase students' awareness of New Jersey's Quit services.

Increasing the Number of Tobacco Users Who Initiate Cessation

In 2001, 22.1% of New Jerseyans were current cigarette smokers. The CTCP's objective to reduce the prevalence of adults who are current cigarette smokers to 17.3% by June 30, 2003 is unattainable through decreases in smoking initiation alone. Reaching this target will require a substantial increase in the rate of smoking cessation. The majority of adult and adolescent smokers want to quit smoking. Helping smokers quit presents the best chance for short-term reductions in tobacco-related morbidity and mortality.

Nicotine Dependence Treatment Services

New Jersey is unique in providing smokers with three types of free or low-cost treatment options. Two of the services, New Jersey Quitnet, an online resource that provides comprehensive support for those trying to quit, and New Jersey Quitline, a toll-free telephone-based service that provides one-on-one smoking cessation counseling, were launched in late October 2000. Additionally, 15 New Jersey Quitcenters were established throughout the state between December 2000 and March 2002 to offer individual and group counseling as well as nicotine replacement therapy.

Media and Marketing

In September 2001, CTCP launched a new series of quit ads ("Things Telling You") and added television advertising to the media mix for promotion of New Jersey Quitline and Quitnet. In total, CTCP purchased 992 television spots, 8064 radio spots, and various newspaper and bus placements to promote its cessation services during 2001. In addition to other advertising and promotional activities, 19,000 cessation kits (a.k.a. "black boxes") were distributed during 2001 to healthcare providers to educate and encourage referral to quit.

Awareness of Promotional Efforts

Despite these efforts, few New Jerseyans were able to confirm awareness of a Quit services advertisement. Of adults able to confirm awareness of *any* anti-tobacco advertisement on the 2001 NJATS, only 7.5% identified one of the state's Quit services ads. However, data from CTCP Quit services suggest media efforts can impact utilization. For example, after television advertising began in September 2001, 50% of NJ Quitline users during the last quarter of 2001 reported television or radio as how they had heard of the service. Registrant data for NJ's Quitline and Quitnet suggest that television exposure increased contacts during and immediately following the two-month television run, underscoring the importance of television advertising.

Utilization of Quit Services

By the end of 2001, New Jersey Quitnet reported over 266,000 visits to the website and 4500 New Jerseyans registered as site users to help them with their quit attempts. In addition, 2750 smokers enrolled in New Jersey Quitline for telephone cessation counseling and 1120 smokers sought in-depth smoking cessation counseling through the New Jersey Quitcenters.

While consistent growth in Quit services utilization is encouraging, the overall rate of utilization remains extremely low. As of December 2001, after Quit services were in place for slightly more than a year, less than 1% of New Jersey smokers have accessed the state's free and low cost Quit services. However, heavy radio and television promotion of the Quit services did not begin until fall 2001. Now that a full range of New Jersey Quit services have been implemented, the CTCP must work to significantly improve awareness and utilization of its services.

Physician Counseling and Referral

Visiting a physician in the last year did not guarantee that a tobacco user would be identified or, subsequently, advised to quit or referred to New Jersey Quit services. Based on the 2001 NJATS, two-thirds of all adults who saw a physician in the past 12 months were asked about their smoking status. This is consistent with national data indicating that physicians identified patients' smoking status at 67% of all visits and this proportion has not increased over time.[14] Determining smoking status is a critical precursor to providing cessation counseling or referrals.

However, the 2001 NJATS found that among physicians that did identify smokers, a good proportion advised smokers to quit (63.0%) and some recommended various forms of assistance to their patients. Despite the CTCP having distributed thousands of "black boxes" or cessation kits to New Jersey's health care providers, smokers from the 2001 NJATS reported low rates of physician referral to the state's Quit services (< 9% referred to at least one of the Quit services). Physicians and other health care providers are critical to the success of CTCP's new cessation services. Limited tobacco control funds can be maximized by utilizing available evidence-based clinician materials and methods.[15,16] Adapting these tools for New Jersey would allow the CTCP to take advantage of existing knowledge and allow the program to concentrate on diffusing their message to those in a position to refer smokers.

Quit Attempts and Successes

In 2001, nearly two-thirds of current and previous year smokers (61.6%) in New Jersey reported making a serious quit attempt in the 12 months preceding the NJATS, but less than one out of ten adult smokers (9.2%) were successful in quitting during this time period. This cessation rate is consistent with findings in Massachusetts.[17] While adult smokers in New Jersey were *no* more successful at quitting than last year (10.8%), the percent of smokers attempting to quit significantly increased in 2001 compared to 2000 (55.7%), a 10.6% increase. Smokers take an average of three to four quit attempts before they are successful.[18]

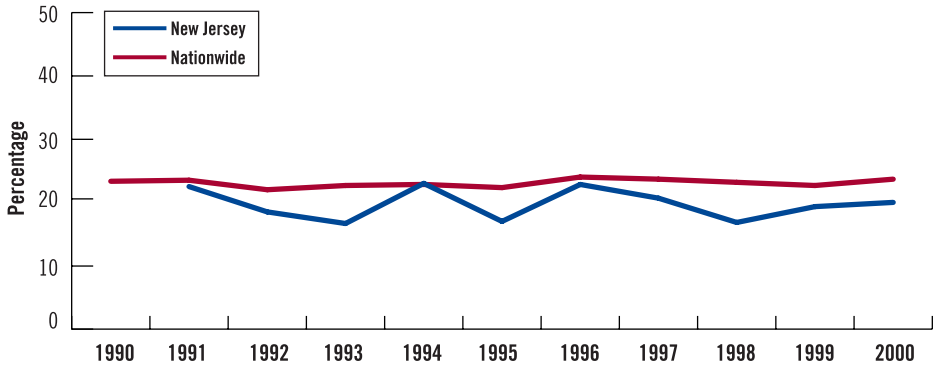
As discussed below, the events of September 11th may be associated with smoking relapse and therefore, could provide some explanation for the lack of improvement in adult cessation rates. It is possible that a number of smokers in New Jersey had previously quit or were in some stage of quitting but relapsed as a result of these events.

Adult Cigarette Smoking

Overall, the 2001 adult cigarette smoking prevalence estimate (22.1%) did not significantly differ from 2000 (19.8%). However, a 47% increase in smoking prevalence was documented among adults aged 45 and older. Given that the 2001 NJATS was carried out from late September through December 2001, it is difficult to discuss these estimates without some mention of September 11th and the events that followed.

Nearly 700 New Jerseyans were lost in the terrorist attacks on September 11th. The degree or intensity of this impact is impossible to calculate. But combined with the added stressors of an economic recession, the threat of future terrorist attacks, environmental consequences, additional strains on an overburdened commuter system, and an anthrax investigation, we suspect that the events surrounding September 11th, to some degree, contributed to the change in tobacco use behavior among New Jersey adults. Although the research is limited, recent studies have suggested a sizeable increase in the levels of stress, depression, anxiety, and associated substance use, including tobacco use, after September 11th.[19-21] In New Jersey, 17% of current smokers reported they smoked more since the attacks; however, it is unknown how many former smokers may have relapsed.[22] Since older adults are more likely to be former smokers, having quit at an earlier age, it is plausible that this population was particularly vulnerable to relapse during this time.

Figure 2: Prevalence of current cigarette use among adults in the US and New Jersey -BRFSS, 1990-2000



New Jersey's adult smoking rate remains lower than most other states, currently ranking 14th lowest nationally. However, cigarette smoking rates were relatively static over the past decade, both in New Jersey and in the US overall (see Figure 2). Furthermore, a recent study which adjusted for demographic shifts (e.g., race and age) indicated that state trends during the 1990s for cigarette smoking were essentially unchanged in 32 states, including New Jersey, and actually increased in 14 states.[23]

Decreasing Exposure to ETS

Environmental tobacco smoke (ETS) represents a significant public health threat to both smokers and non-smokers. Reducing exposure to ETS protects nonsmokers, particularly children, but can also influence social norms and encourage smokers to quit. ETS causes 53,000 deaths each year among nonsmokers, including 1,600 in New Jersey.[24]

Community Mobilization

Since CTCP's inception, community partners have conducted numerous activities targeted at reducing ETS. During 2001, twelve hundred employers/workplaces/restaurants and 141 managers of public places were contacted by Communities Against Tobacco (CAT) coalitions about the adoption of smoke-free policies. The Local Information Network Communication System (LINCS) reported the adoption of over 140 new worksite tobacco control policies in 2001. Restaurants and bars are among the most common sources of involuntary ETS exposure after home and work. LINCS reached out to 6300 restaurants to promote the adoption of smoke-free policies and conducted 230 meetings/seminars on smoke-free dining for restaurant owners.

Attitudes Toward Smoke-Free Policies

According to the 2001 New Jersey Eating and Drinking Establishment Tobacco Survey (NJEDTS), which was conducted between September and October 2001, most restaurants and bars with smoke-free policies either felt their policy was good for business (60.9%) or made no difference to their business (27.8%). Owners and managers of successful smoke-free establishments can support efforts to educate other restaurant/bar owners and provide convincing testimonials about the benefits of becoming smoke-free. Based on the 2001 NJATS, three-quarters of all adults (76.2%) preferred to sit in the nonsmoking section of a restaurant. Even among current smokers, 32.1% preferred being seated in a nonsmoking section and 30.0% had no preference. The 2001 NJATS also found there is widespread public support, even among smokers, for complete smoking bans in day care centers and schools. Additionally, the proportion of *smokers* who favored a smoking ban in indoor work areas significantly increased from 37.6% in 2000 to 46.1% in 2001, a 22.6% increase.

Policies Protecting New Jerseyans From ETS

On August 27, 2001, legislation that expanded the statutory prohibition on smoking in school buildings to school grounds was signed into law (NJSA 26:3D-17b). However, only a 100% tobacco-free policy would prohibit the use of all tobacco products by everyone (i.e., students, faculty and visitors), in all locations (i.e., indoors, on school grounds, in school vehicles, and at school sponsored events), 24 hours a day. Based on the 2002 New Jersey School Health Education Profiles (NJSHEP), 42% of schools serving grades 6 to 12 had a 100% tobacco free policy that prohibited the use of all tobacco products by everyone in all locations 24 hours a day. This represents an increase from 2000 where one out of three schools (32.6%) had a 100% tobacco free policy. With eight years remaining, New Jersey is already halfway to reaching the Healthy People 2010 target of making *every* school tobacco-free.

According to the 2001 New Jersey Workplace Tobacco Survey (NJWTS), which was conducted between July and October 2001, 88.4% of all workplaces reported having a smoke-free policy. New Jersey law requires private employers with 50 or more employees to establish written rules to protect employees from ETS (NJSA 26:3D-23-25). In 2001, of workplaces with 50 or more employees, 77.9% reported having a written policy that prohibited smoking or limited use to designated areas. However, a policy does not imply enforcement.

Based the 2001 NJEDTS, approximately a third (36.2%) of restaurants and bars were smoke-free (i.e., a total ban on smoking indoors). Over a third of restaurants (37.3%) provided some accommodations for nonsmokers

and 26.5% lacked any smoking restrictions. According to LINCS reports, 654 restaurants in the state became smoke-free during 2001. New Jersey has made steady progress toward increasing the number of restaurants and bars with smoke-free policies, mainly due to its dedicated community partners.

Exposure to ETS

The 2001 NJYTS found that 52.1% of middle school students and 69.4% of high school students reported being exposed to ETS in either rooms or cars in the seven days preceding the survey. Furthermore, 42.9% of students reported living with someone who smoked cigarettes. Data show that adolescents who live with a current smoker are more likely to be smokers themselves.[25] Although self-reported ETS exposure among middle school students significantly declined by 13.8% from 1999 to 2001, self-reported ETS exposure among high school students and the proportion of students who lived with someone who smoked remained largely unchanged.

Based on the 2001 NJATS, roughly a quarter of adults (23.2%) reported someone smoked inside their homes during the 30 days preceding the survey. One in five households with children (19.7%) reported someone smoking inside their home in the past 30 days. There was no change in the proportion of adults reporting household ETS exposure from 2000 to 2001.

Decreasing the Acceptance of Tobacco

Effective tobacco control initiatives rarely address only one CTCP goal. The previously discussed program goals of preventing youth initiation, increasing cessation, and reducing ETS collectively contribute to changing the social norms around tobacco use. Not yet discussed are CTCP mass media and public relations, potentially powerful strategies to further shift social norms.

Exposure to Tobacco Control Messages

Based on the 2001 NJATS, 65.8% of adults reported having recently seen an anti-tobacco ad and 26.5% of adults were able to confirm exposure by accurately describing an advertisement. Of adults who were able to confirm awareness of an anti-tobacco ad on the 2001 NJATS, 16.1% identified a CTCP ad. Specifically, 7.5% identified one of the state's Quit services ads and 3.8% identified a *Not for Sale* / REBEL ad.[ii] Some respondents (4.8%) identified the "Don't Get Sucked In" billboard ads placed as early as May 1999.

Newspaper Coverage of Tobacco

Content analysis of newspaper clippings showed a link between strategic public relations and press coverage, particularly for statewide efforts with great public appeal. Overall, 29.2% of tobacco-related clippings in a 16-month period ending December 2001, were specific to CTCP programs. Of articles about a CTCP program, 68% of all items and 91.0% of items on the Quit services contained contact information, which is essential for promoting utilization of services. Local efforts, such as CAT and REBEL programs, seem to have received less frequent coverage than other tobacco-related issues in New Jersey, suggesting a need for additional emphasis and training on media relations and media advocacy.

[ii] The target audience for *Not for Sale* / REBEL advertisements is youth, not adults.

CTCP Benchmarks

Figure 3 presents expected outcomes after a sufficiently funded tobacco control program is applied effectively over several years. The CTCP has made steady progress towards short-term outcomes. While it is still too early to demonstrate longer outcomes such as reductions in tobacco-related disease and associated health care costs, the CTCP is beginning to document progress on some intermediate as well as long-term outcomes in only its first 18 months of operation. The CTCP needs to maintain its commitment to preventing tobacco use among young people through effective prevention and cessation programs for youth and young adults, reducing tobacco use among adults by promoting and increasing access to Quit services, and increasing the number of smoke-free environments. New Jersey can only see consistent reductions in smoking prevalence over time given adequate and sustained funding as recommended by CDC's *Best Practices*.

Figure 3: NJCTCP Progress Toward Suggested Tobacco Control Outcomes as of December 2001

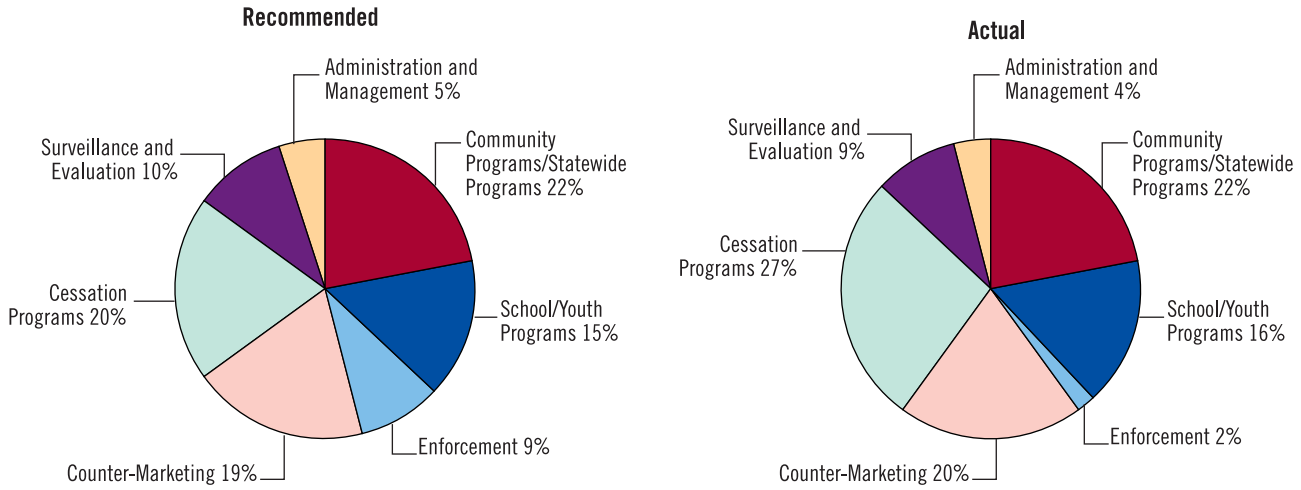
Tobacco Control Outcomes and Timeline	Status*
Short Term Outcomes (< 12 months after the start of the program)	
Increase public awareness of tobacco control program	Steady progress
Increase initiation of nicotine treatment programs by adults and youth	Steady progress
Increase anti-tobacco media coverage	Steady progress
Increase number of smoking bans, ordinances, and policies	Steady progress
Intermediate Outcomes (1–2.5 years after the start of the program)	
Increases in the establishment of public nonsmoking environments	Steady progress
Decreases in cigarette sales to minors	Limited progress
Increases in knowledge of/attitudes toward key media messages	Limited progress
Decreases in the consumption of tobacco products	Limited progress
Long-Term Outcomes (2.5–5 years after the start of the program)	
Decreased percentage of adults smoking	Progress not yet documented
Decreased percentage of youth smoking	Steady progress
Decreased exposure to secondhand smoke	Limited progress
Longer Outcomes (10 or more years after the start of the program)	
Reduced number of tobacco-related cancers	Progress not yet documented
Reduced number of heart attacks and strokes	Progress not yet documented
Reduced health care costs related to tobacco combination	Progress not yet documented

Adapted From: *NJCTCP Logic Model & CDC-Office on Smoking and Health, Investing in Tobacco Control: A Guide for State Decisionmakers, February 2001*

** Based on data from July 2000 to December 2001, steady progress denotes all outcome indicators show growth or improvement; limited progress reflects conflicting or limited improvement as shown by outcome indicators.*

Figure 4 depicts Best Practices' recommended budget distribution for New Jersey based on suggested program elements and actual funding distribution for fiscal year 2001-2002.[iii] The distribution of CTCP funds is mostly consistent with Best Practices' recommendations. Cessation efforts are particularly well supported. The proportion of funding allotted towards administration and management is near the recommended level; however, given the magnitude of the program, the CTCP may benefit from funding administration and management at 5% of the overall budget. Additionally, considering the importance of reaching the Synar benchmark of 80% retailer compliance with age of sale laws by 2003, additional resources should be directed towards enforcement. It should be noted that CDC recommends that tobacco control in New Jersey be funded at a level of $45 to $121 million. In the 2001-2002 fiscal year, New Jersey's program budget was at 71% of the lowest estimate for funding at a total of $32 million.

Figure 4: *Best Practices'* recommended funding for tobacco control in New Jersey compared to FY01/02 actual funding for CTCP

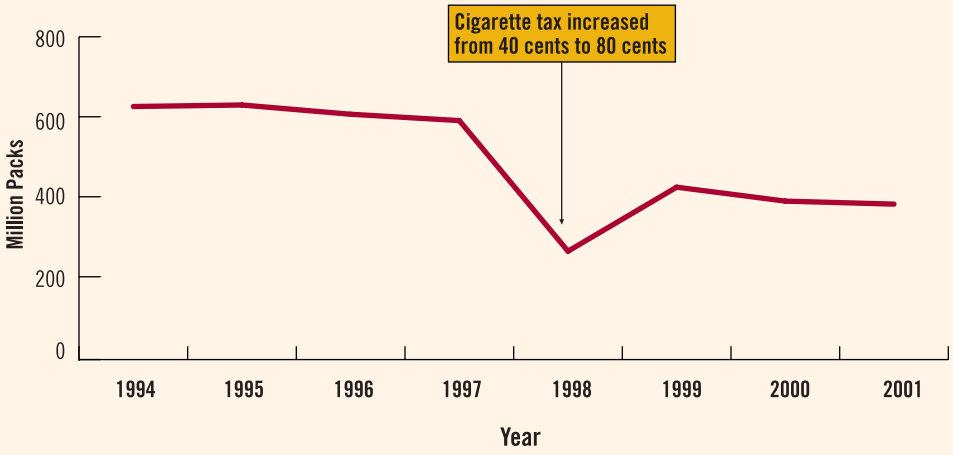


[iii] Chronic disease programs to reduce the burden of tobacco-caused diseases are not included. However, DHSS has funded a new initiative with the Cancer Institute of New Jersey for $20 million, which will include addressing this recommended element of *Best Practices*.

Emerging Issues

On June 30th, 2002, New Jersey passed a 70-cent tobacco tax increase giving the state the highest tobacco tax in the nation, tied with New York at $1.50. As a result, New Jersey was hailed as one of the nation's emerging leaders in tobacco prevention according to the Campaign for Tobacco Free Kids' mid-year update on funding for tobacco control released in July 2002.[26] The tobacco tax increase will facilitate CTCP's progress toward reducing cigarette consumption and smoking prevalence. In 1998, a significant decrease in sales, and likely consumption, was documented when the cigarette tax in New Jersey was increased from 40 cents to 80 cents.

Emerging Issues: Cigarette packs legally sold in New Jersey — NJ Department of Treasury, Division of Revenue, 1994-2001



Research shows that higher cigarette prices are associated with decreased rates of tobacco use, particularly among children, adolescents, and pregnant women.[27,28] In New Jersey, a cigarette tax increase of 70 cents is projected to prevent 61,200 youth from becoming future smokers and to prompt 46,000 adult smokers to quit.[29] CTCP is equipped, via their Quit services, to assist New Jersey smokers who choose to free themselves from nicotine addiction and dependence.

INTRODUCTION

Smoking was responsible for more than 10,000 deaths in New Jersey in 1999 and was estimated to cost more than $2.4 billion in medical expenditures and an additional $2.2 billion in lost job productivity.[30] On average, smokers lose approximately 14 years of life.[31] Tobacco prevention and control initiatives are among the most cost-effective public health measures to reduce morbidity and mortality.[32]

Since its inception in January 2000, the Comprehensive Tobacco Control Program (CTCP) of the New Jersey Department of Health and Senior Services (DHSS) has implemented a full range of statewide and local initiatives to reduce tobacco use. In particular, 2001 was a period of considerable public health action. Major activities are described in this report. More information on the state's program components can be found in the *New Jersey Comprehensive Tobacco Control Program 2001 Annual Report*.[2] Interventions are designed to support the goals of the CTCP described below:

1. Decrease the initiation of tobacco use by youth under 18 years of age and young adults aged 18 to 24.
2. Increase the number of youth and adult tobacco users who initiate cessation treatment.
3. Decrease the exposure to environmental tobacco smoke (ETS).
4. Decrease the acceptability of tobacco among all populations.
5. Reduce disparities related to tobacco use and its effects among different population groups.

The CTCP is based on CDC's *Best Practices for Comprehensive Tobacco Control Programs*. As recommended, multiple approaches were developed and applied in order to achieve the greatest impact on tobacco-related attitudes and behaviors. These multiple initiatives of the CTCP are intended to have a synergistic effect in ultimately reducing tobacco-caused morbidity and mortality in New Jersey. Monitoring the achievement of program goals and evaluation of statewide initiatives are an ongoing part of the CTCP. This report provides a summary of key findings from the following surveillance and evaluation activities implemented by UMDNJ-School of Public Health for DHSS over the past year:

- The **New Jersey Youth Tobacco Survey (NJYTS)** measured tobacco-related attitudes and behaviors among middle and high school students.
- The **New Jersey Adult Tobacco Survey (NJATS)** assessed the prevalence of tobacco use among adults, existence of ETS policies, attitudes about tobacco, and media awareness.
- The **New Jersey School Health Education Profiles (NJSHEP)** evaluated tobacco control policies and health education activities in public schools.
- The **New Jersey Workplace Tobacco Survey (NJWTS)** collected baseline data on workplace tobacco control policies.
- The **New Jersey Eating and Drinking Establishment Tobacco Survey (NJEDTS)** collected baseline data on smoking policies in New Jersey's restaurants and bars.
- The **Media Tracking Study** identified and monitored tobacco industry marketing and tobacco control messages seen by New Jersey audiences.
- The **Process Evaluation Project (PEP)** monitored how the state's programs were implemented and provided community partners with opportunities to learn from one another.

METHODOLOGY

Overview

The methodology employed for the CTCP evaluation utilized a *goal based evaluation model*.[33] This approach was detailed in a previous report.[34] The evaluation plan focuses on the activities; outputs; and initial, intermediate, and long-term outcomes outlined in the state's program logic model, to direct measurement activities (Appendix A). Surveillance and evaluation activities employed by UMDNJ-School of Public Health are consistent with the recommendations set forth in CDC's *Best Practices for Comprehensive Tobacco Control Programs* and *Introduction to Program Evaluation for Comprehensive Tobacco Control Programs*.[1,35]

A number of studies, detailed below, were utilized to collect evaluation indicators. Data from surveys were analyzed with SUDAAN statistical software to correct for the complex sample design and generate 95% confidence intervals. Differences between estimates were considered statistically significant at the $p \leq 0.05$ level if the 95% confidence intervals did not overlap.[36] Hypothesis testing based on a t-statistic was used to determine whether there was a statistically significant change in estimates between successive years.

New Jersey Youth Tobacco Survey (NJYTS)

The purpose of the NJYTS is to monitor tobacco use behavior, knowledge, and attitudes among middle and high school students over time. The self-administered survey addresses eight content areas: tobacco prevalence, access to tobacco products, smoking cessation, smoking intention, perceived consequences of tobacco use, mass media, awareness of tobacco industry strategies, and ETS. A two-stage cluster design sample is utilized to produce a representative sample of all 7th through 12th grade students in the state. The baseline NJYTS occurred in fall 1999. The 2001 NJYTS was administered to 5413 middle school students (grades 7-8) in 60 schools and 4176 high school students (grades 9-12) in 55 high schools between October and November 2001. An overall participation rate of 73% and 61% was achieved in the middle and high schools, respectively. Prevalence rates for cigarette use for middle and high school students by gender and race are presented with 95% confidence intervals in Appendix B-Table 1.

New Jersey Adult Tobacco Survey (NJATS)

The purpose of the NJATS is to monitor tobacco use behavior (i.e., prevalence and cessation), knowledge, and attitudes among adults over time. The baseline NJATS occurred in summer and fall 2000. The computer assisted telephone interview (CATI) survey includes the following content areas: demographics, tobacco use, smoking cessation, ETS at home and at work, medical practitioner advice, health status, tobacco knowledge, tobacco policy, health coverage, and media (media is addressed in more detail under "Media Tracking Study"). A random digit dialing (RDD) sampling approach is utilized with oversampling of young adults (aged 18 to 24), smokers, and recent quitters. For the 2001 NJATS, the screening response rate was 49.8% and the extended interview cooperation rate was 79.4%. Over 3900 adults completed telephone surveys between late September and December 2001. Prevalence rates for cigarette use by gender, race, and age group are presented with 95% confidence intervals in Appendix B-Table 2.

New Jersey School Health Education Profiles (NJSHEP)

The purpose of the NJSHEP is to monitor statewide implementation of comprehensive school health education in middle and high schools, with a specific focus on tobacco policies. This study utilizes the School Administrator SHEP instrument developed by the CDC. The core instrument for school administrators / principals focuses on various school policies related to health education curriculum, physical education, tobacco use policies, nutrition related policies, and HIV policies and services. The baseline NJSHEP occurred in spring 2000. For the 2002 NJSHEP, a total of 420 public schools were randomly selected from all public, charter, and vocational schools in New Jersey, serving grades 6 to 12. During the spring of 2002, the self-administered survey was mailed to schools twice and followed up with a postcard reminder. A total of 336 schools responded, yielding an 80% participation rate. A detailed table of school tobacco use policies is found in Appendix B-Table 3.

New Jersey Workplace Tobacco Survey (NJWTS)

The purpose of the NJWTS is to collect information on tobacco control policies in New Jersey workplaces. The CATI survey collects data on the prevalence of workplace tobacco control policies, levels of smoking restriction, levels of compliance, policy enforcement strategies, and workplace tobacco treatment programs. The sample design utilizes a probability-proportional-to-size (PPS) method with the measure of workforce size (i.e., number of employees). The sample is also stratified by region and type of business. For the 2001 baseline NJWTS, the response rate was 67.1%. The NJWTS was completed by 1,120 workplaces between July and October 2001. A detailed table of workplace policies by workplace characteristics presented with 95% confidence intervals is found in Appendix B-Table 4.

New Jersey Eating & Drinking Establishment Tobacco Survey (NJEDTS)

The purpose of the NJEDTS is to collect information on smoking policies among restaurants and bars. The CATI survey collects data on smoking policies, levels of smoking restriction, levels of compliance, policy enforcement strategies, and the perceptions and attitudes of owners / managers on tobacco-related issues. The probability-proportional-to-size (PPS) sample is selected for establishments with five or more employees; smaller establishments are selected with equal probability within strata. Establishments are stratified by region and number of employees (5-25, 26-114, $\geq$115). For the 2001 baseline NJEDTS, the response rate was 72%. A total of 437 eating and drinking establishments completed the survey between September and October 2001. Appendix B-Table 4 includes the smoking policies of eating & drinking establishments.

Media Tracking Study

The Media Tracking Study is a continuous data collection system designed to identify and monitor media coverage of tobacco-related issues, with an emphasis on the activities of the CTCP and its partners. The Media Tracking Study includes collection and review of newspaper clippings, assessment of media awareness among adult residents, analysis of television advertisement placements, and process measurements of specific CTCP media campaigns, particularly for treatment services. Newspaper clippings from New Jersey and selected out-of-state newspapers serving New Jersey residents were collected and analyzed to document the

success of CTCP public relations efforts. Clippings were collected during a 16-month period (September 1, 2000 to December 31, 2001). Items were then coded by topic area (e.g., cessation, prevention) and CTCP-specific information. Tobacco-related television advertising, excluding national and cable TV buys, was monitored in the New York media market and selected portions of the Philadelphia market. Between April 2001 and December 2002, a video monitoring service screened television advertisements by using a list of keywords designed to identify advertising for the CTCP and other campaigns. Another source of media data was the 2001 NJATS which included questions designed to gauge awareness of CTCP promotional and advertising messages. Questions measured whether respondents had seen anti-tobacco media, followed by a prompt for more specific information to confirm their recall of the message. Responses were coded according to whether recall was confirmed based on being able to identify the specific ad and the sponsoring organization.

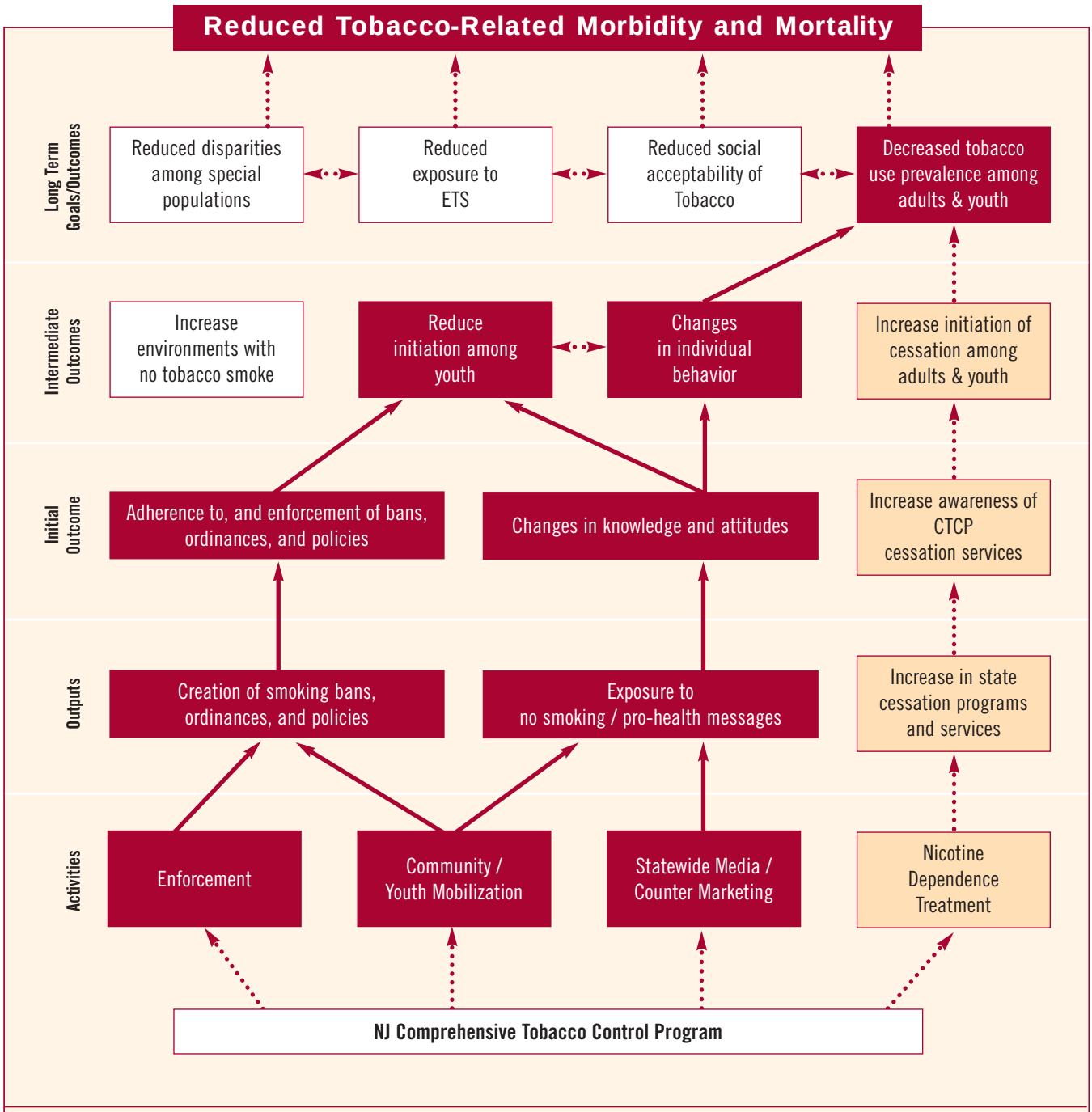
Process Evaluation Project (PEP)

The PEP was designed to provide useful information and feedback to DHSS about the community-based components of the CTCP. In the fall of 2001, over 80 key informant interviews were conducted with state and local level CTCP managers and coordinators. Data were collected and analyzed from a variety of other sources, including monthly and/or quarterly reports, and grant contracts/agreements. For the purpose of this report, PEP reviewed secondary data collected by various community and statewide partners. Specifically, data mentioned in this report are reported through December 2001 and include Quit services utilization, REBEL membership, CAT coalition activities, and local tobacco ordinance data from LINCS and the New Jersey Group Against Smoking Pollution (NJGASP). Comparisons with previously reported data on community activities should be made with consideration of timeframes.

◆ ◆ ◆ ◆

This report updates information presented in the *Baseline Measures* report[34] released in 2001, and where appropriate, provides year-to-year comparisons. However, it should be noted that any changes in estimates from repeated measures (i.e., NJYTS, NJATS, NJSHEP) should be interpreted with caution since trends can not be inferred from what is currently only two points of data collection. Furthermore, differences in timing, consent procedures, survey questions and ordering, sampling approach, sample size, weighting, and participation rates can affect survey estimates.[37]

New data sources, used to provide additional baseline measures or address recent developments in CTCP's programmatic efforts, are also presented in this report. Details on CTCP program components and associated activities can be found in the *New Jersey Comprehensive Tobacco Control Program 2001 Annual Report*.[2] This report presents impact and outcome indicators on tobacco use, attitudes, and policies in New Jersey and utilizes the program goals and logic model of the CTCP as a framework for presenting these data. Disparities among population groups are not discussed separately but are addressed across all goals where such disparities exist.



Note: *Adapted from CTCP Logic Model*

The CTCP utilizes a logic model to plan and direct various strategies to achieve the goal of **decreasing initiation among youth and adults**. The primary pathway for achieving the desired goal is highlighted and identified with solid lines. Since an effective tobacco control program utilizes a comprehensive approach, where all or most factors influence and reinforce one another, supporting factors are also identified with dashed lines.

SECTION 1: DECREASING SMOKING INITIATION AMONG YOUTH AND YOUNG ADULTS

The majority of adult smokers start smoking before the age of 18. Therefore, it is encouraging that recent national surveys have reported a decline in youth smoking. Tobacco use among youth peaked in the 1990s, but steadily declined since 1998.[10] However, young adults (aged 18 to 24) now have the highest rates of cigarette smoking relative to other age groups. This may reflect the aging of a cohort with high smoking levels and the tobacco industry's targeted marketing of its youngest legal consumer.[9, 11] Monitoring patterns of use and intervening among these two vulnerable populations is essential for New Jersey to sustain the decline in youth smoking. More details on youth tobacco use in New Jersey can be found in *2001 New Jersey Youth Tobacco Survey: A Statewide Report*.[8]

To assess progress toward the goal of decreasing initiation of tobacco use among young people, we examine activities and outputs in the logic model that influence youth tobacco use such as minor access to tobacco, local ordinances, and participation in youth empowerment activities. We also examine outcome indicators such as lifetime use of tobacco products, age of initiation, and current use of cigarettes among youth and young adults. Other strategies that affect youth tobacco use, such as school-based tobacco policies and attitudes toward tobacco marketing practices, are discussed in Sections 3 (ETS) and 4 (Social acceptability).

Community and Youth Mobilization

Youth empowerment programs are among the newest and most promising strategies for youth smoking prevention. Although still in its infancy, New Jersey's youth-led grassroots movement known as REBEL has expanded rapidly. By the end of 2001, approximately 1000 New Jersey youth were active members of REBEL while approximately 4000 additional New Jersey youth supported the REBEL movement by becoming endorsing members. In the last half of 2001, 616 local REBEL activities were conducted throughout the state, an average of more than 50 local REBEL activities each month. The CTCP also supported tobacco education programs operated by the Liberty Science Center (LSC). During the 2001-2002 season, more than 200,000 students, teachers, and family members saw at least one of LSC's tobacco education programs, "Extreme Choices" and "Hot Air."

Media and Countermarketing

Launched in February 2001, *Not For Sale* is the theme of New Jersey's first anti-tobacco advertising campaign introduced to support the REBEL movement. The youth anti-tobacco media campaign is intended to influence attitudes toward smoking and, in turn, prevent smoking initiation or reduce consumption. During 2001, the CTCP placed 454 television spots and 3234 radio spots to promote *Not For Sale*. Additionally, spots appeared in over 300 schools and 250 movie theaters throughout the state.

Awareness of Anti-Tobacco Promotional Efforts

The 2001 NJYTS indicated that the majority of New Jersey middle and high school students reported seeing

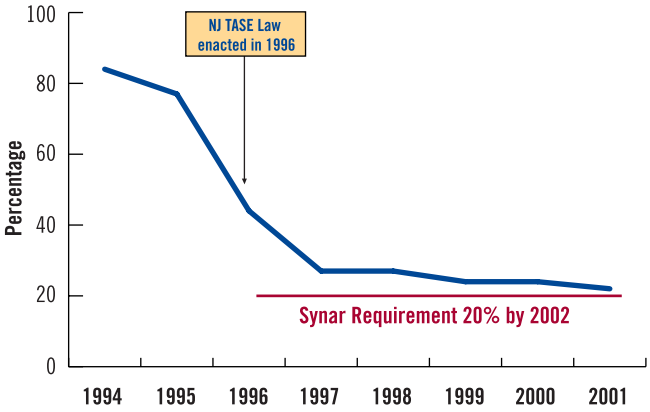
commercials on television (84.8 ±1.4%) and hearing radio commercials (61.1 ±2.3%) about the dangers of smoking in the 30 days preceding the survey.

New items added to the 2001 NJYTS collected data specifically on youth's awareness of CTCP youth empowerment activities (i.e., REBEL) and media initiatives ("Not for Sale"). One-third of students had heard of REBEL (32.4 ±4.9%) and more than half (56.1 ±2.7%) reported seeing or hearing "Not for Sale" media campaign messages in the 30 days preceding the survey. Media messages with the tag line "Not for Sale" were designed to support the REBEL movement. Findings from NJYTS indicated that high school students who reported more frequent exposure to "Not for Sale" were more likely to have ever heard of REBEL.

Minor Access to Tobacco

As of October 1, 2001, 77.9%[iv] of New Jersey's tobacco merchants were compliant with the Tobacco Age of Sale law based on the federal Synar amendment, a slight increase from a compliance rate of 75.4% reported in 2000.[38] In fact, New Jersey's Tobacco Age of Sale Enforcement (TASE) program has consistently improved compliance rates since 1994, as shown in Figure 5.

Figure 5: Non-compliance rate in New Jersey - TASE Enforcement Program, 1994-2001



Based on the 2001 NJYTS, two out of three current smokers, under the age of 18, who purchased cigarettes in the 30 days preceding the survey, reported they were not asked to show proof of age. Furthermore, over half of current smokers (58.1 ±8.2% in middle school, 65.4 ±4.9% in high school) reported they were not refused a cigarette sale because of their age. From 1999 to 2001, there was no significant improvement in the proportion of minors who reported being able to purchase cigarettes.

For current cigarette smokers under age 18, common methods of obtaining cigarettes were to buy them in a store, borrow or "bum" a cigarette, or give someone money to buy cigarettes for them. Middle school students were more likely to "bum" a cigarette from someone (29.1 ±5.7%) while high school students were more likely to purchase them (33.7 ±6.9%), most often in convenience stores.

Lifetime Use of Tobacco Products

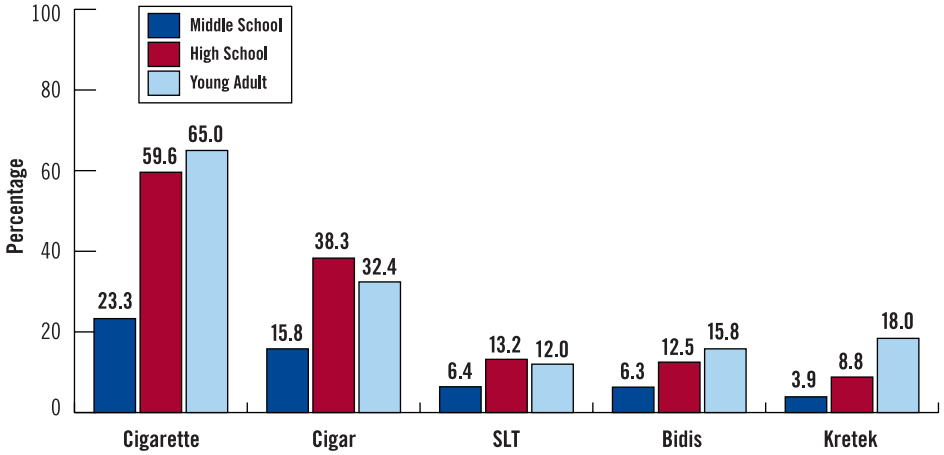
Lifetime use of tobacco has been associated with smoking initiation and progression to regular smoking. Therefore, it is necessary to consider lifetime prevalence among youth and young adults. For each tobacco product, youth and young adults who reported any use in their lifetime were considered to be ever users. As

[iv] The merchant compliance rate of 77.9% is based on the weighted state sample.

shown in Figure 6, when assessing lifetime use of tobacco products, cigarettes were the most frequent form of tobacco used by both youth and young adults. Roughly a quarter of middle school students (23.3 ±3.8%) and more than half of high school students (59.6 ±4.2%) had tried cigarettes. Among young adults aged 18-24, 65.0% (±3.5) had ever used cigarettes. Although less prevalent than cigarettes, the use of cigars and smokeless tobacco was not uncommon. Additionally, the emergence of other forms of tobacco such as bidis and kreteks (also known as clove cigarettes) was notable in middle and high school students as well as young adults.

As detailed in the 2001 NJYTS report, rates of reported lifetime use dropped significantly for every tobacco product for middle school and high school students since 1999.[8] Based on the 2001 NJATS, lifetime use among young adults did not change significantly since 2000.

Figure 6: Percentage of middle school students, high school students, and young adults who ever used tobacco, by type of product - NJYTS, 2001; NJATS, 2001



Age of Initiation

Early age of tobacco use initiation has been associated with current, frequent and daily smoking, and whether students have ever smoked daily.[39] Therefore, delaying the onset of smoking can prevent youth from becoming established smokers and prevent future generations from tobacco addiction. For these reasons, it is important to examine the age at which youth start smoking so that educators and public health practitioners can implement effective, age-appropriate prevention strategies.

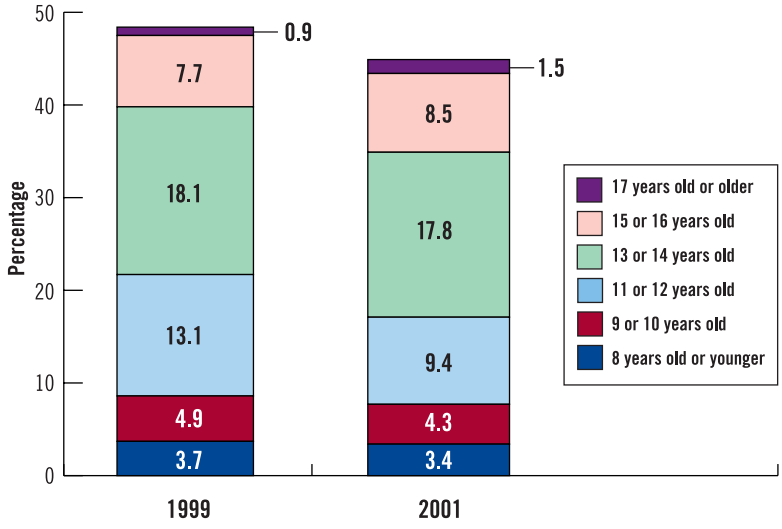
Youth

The overall number of high school students who indicated they ever smoked has declined since 1999. According to the 2001 NJYTS, approximately 45.9% (±3.7) of high school students reported ever having smoked a whole cigarette, down from 49.7% (±2.8) reported in 1999. The 7.6% decline in smoking initiation rates among high school students in a two-year period, while not statistically significant, reflects modest progress towards achieving the CTCP's goal of reducing smoking initiation among youth.

Although preventing initiation is best, delaying the age at which students begin smoking is also important as it reduces their likelihood of becoming regular smokers. Based on the 2001 NJYTS most high school students

in New Jersey who smoked a whole cigarette reported initiating between the ages of 13 and 14, but the proportion of students who started smoking prior to the age of 13 decreased significantly from 21.6% (±1.5) in 1999 to 17.0% (±3.0) in 2001, a 21.2% decline (see Figure 7).

Figure 7: Age at which high school students first smoked a whole cigarette - NJYTS, 2001



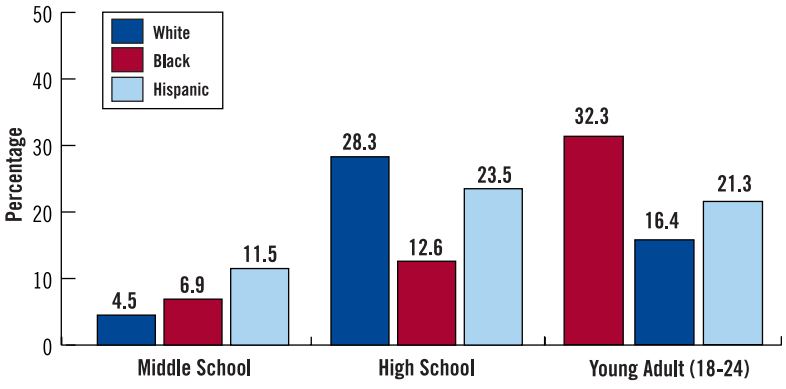
Young Adults

According to the 2001 NJATS, approximately 90.5% (±3.4) of young adults who ever tried smoking tried their first cigarette by the age of 17 and 65.7% (±5.6) started smoking regularly by the age of 17. Therefore, one third of young adult smokers who ever tried smoking started smoking regularly *after* the age of 18. Clearly, young adults remain susceptible to the social pressures that contribute to progressing from occasional to frequent smoking. Targeting prevention and cessation efforts to this age group is necessary to reduce the likelihood that young adults will become regular smokers and to improve their chances of quitting.

Current Use of Cigarettes

Among current users, cigarettes continue to be the most prevalent form of tobacco used among youth as well as adults.

Figure 8: Percentage of middle school students, high school students, and young adults who were current cigarette smokers, by race/ethnicity - NJYTS, 2001; NJATS, 2001



Youth

On the 2001 NJYTS, 6.1% (±2.1) of middle school students and 24.5% (±2.8) of high school students reported smoking a cigarette on one or more days in the 30 days preceding the survey. Current cigarette use was similar among male and female students in both middle school and high school.

Racial/ethnic differences were noted in both middle school and high school students (see Figure 8). Hispanic middle

school students had significantly higher rates of current cigarette use (11.5 ±4.1%) when compared to white middle school students (4.5 ±2.1%). However, in high school, current cigarette use was significantly higher among white and Hispanic students than among black students.

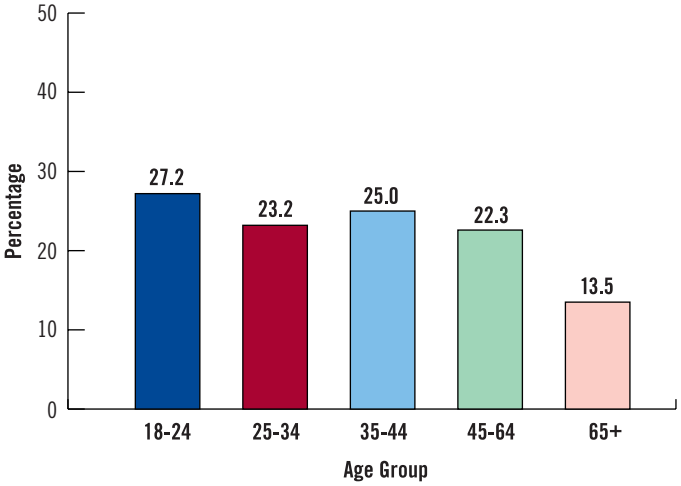
Current cigarette use declined significantly among middle school students from 10.5% (±1.8) in 1999 to 6.1% (±2.1) in 2001, a 42% reduction. Although not statistically significant, current cigarette use also declined by 11% among high school students from 27.6% (±2.5) in 1999 to 24.5% (±2.8) in 2001.

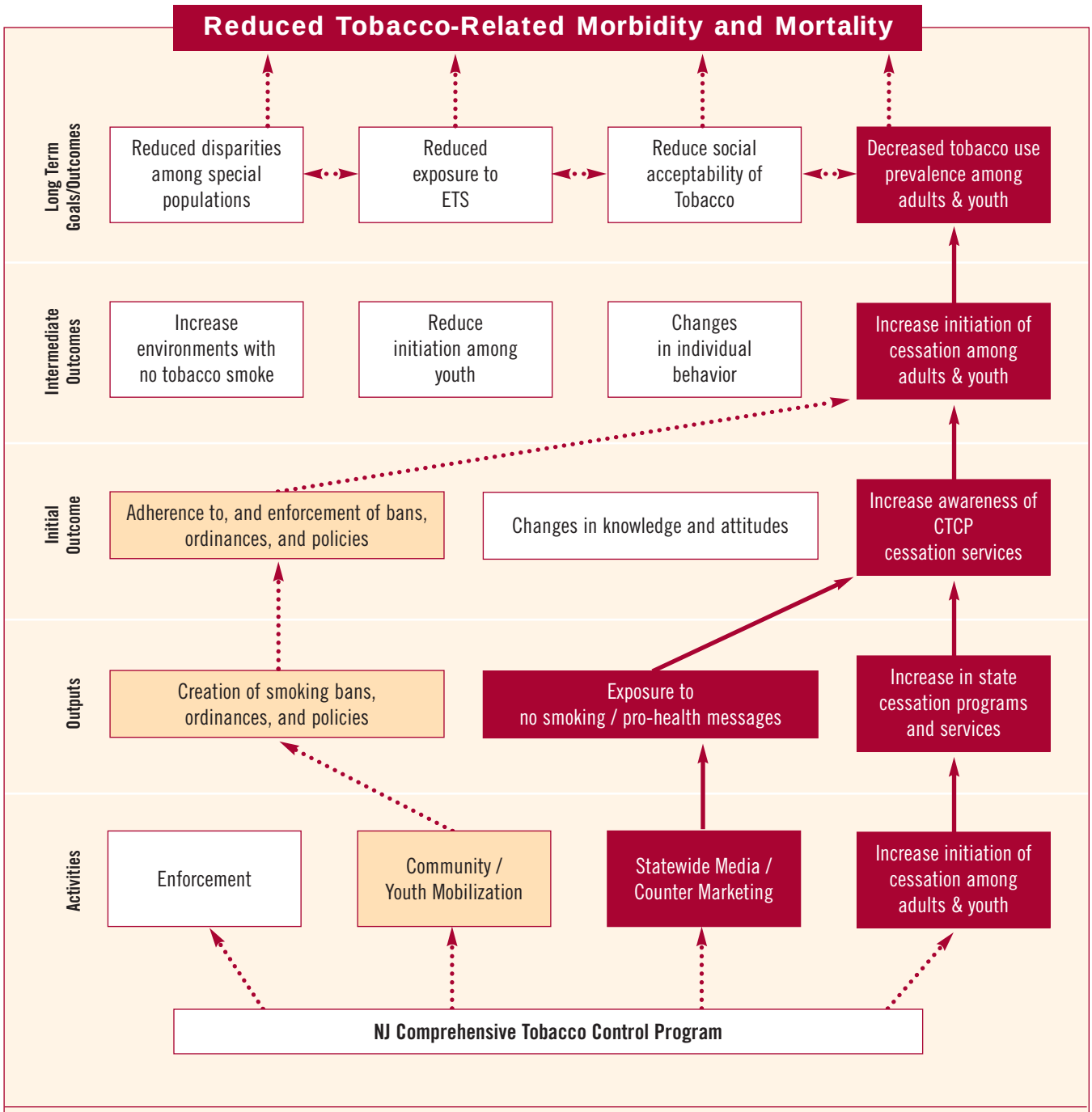
Young Adults

As shown in Figure 9, young adults had a higher rate of current cigarette use than all other age groups. Current cigarette use for this age group remained relatively unchanged from 2000 (27.5 ±3.5%) to 2001 (27.2 ±3.2%).

Current cigarette use was not significantly different by gender, with 30.1% (±4.7) of males and 24.3% (±4.3) of females smoking in the 18-24 year old age group. However, there were racial/ethnic differences in current smoking by young adults. White young adults had significantly higher rates of cigarette use than other racial/ethnic groups (see Figure 8).

Figure 9: Percentage of adults who were current cigarette smokers, by age group - NJATS, 2001





Note: *Adapted from CTCP Logic Model*

The CTCP utilizes a logic model to plan and direct various strategies to achieve the goal of **increasing smoking cessation among youth and adults**. The primary pathway for achieving the desired goal is highlighted and identified with solid lines. Since an effective tobacco control program utilizes a comprehensive approach, where all or most factors influence and reinforce one another, supporting factors are also identified with dashed lines.

SECTION 2: INCREASING THE NUMBER OF YOUTH AND ADULT TOBACCO USERS WHO INITIATE TREATMENT

The CTCP understands the importance of providing assistance to current smokers who want to quit. Effective treatment for tobacco dependence is essential to reducing the prevalence of smoking among all New Jerseyans and can improve overall public health in just a few years. Quitting tobacco at any point in life provides immediate and long-term public health gains. Additionally, the state can potentially save an estimated 500 million dollars from merely reducing adult smoking rates, via cessation, by one percentage point.[40]

In order to assess progress toward this goal, we examine activities and outputs in the logic model that influence cessation such as the utilization of treatment services in New Jersey, mass media, use of nicotine cessation aids, and clinician identification and counseling. Outcome indicators examined include intention to quit, quit attempts, quit successes, and the prevalence of cigarette use. The majority of the findings related to this goal focus on adult smokers. However, data for high school students are presented when available. Very few middle school students have smoked at least 100 cigarettes in their lifetime; therefore, data on middle school students are not presented in this section.

Nicotine Dependence Treatment Services

New Jersey is unique in providing smokers with three types of free or low-cost treatment options. Two of the services, New Jersey Quitnet, an online resource that provides comprehensive support for those trying to quit, and New Jersey Quitline, a toll-free telephone-based service that provides one-on-one smoking cessation counseling, were launched in late October 2000. Additionally, 15 New Jersey Quitcenters were established throughout the state between December 2000 and March 2002 to offer individual and group counseling as well as nicotine replacement therapy.

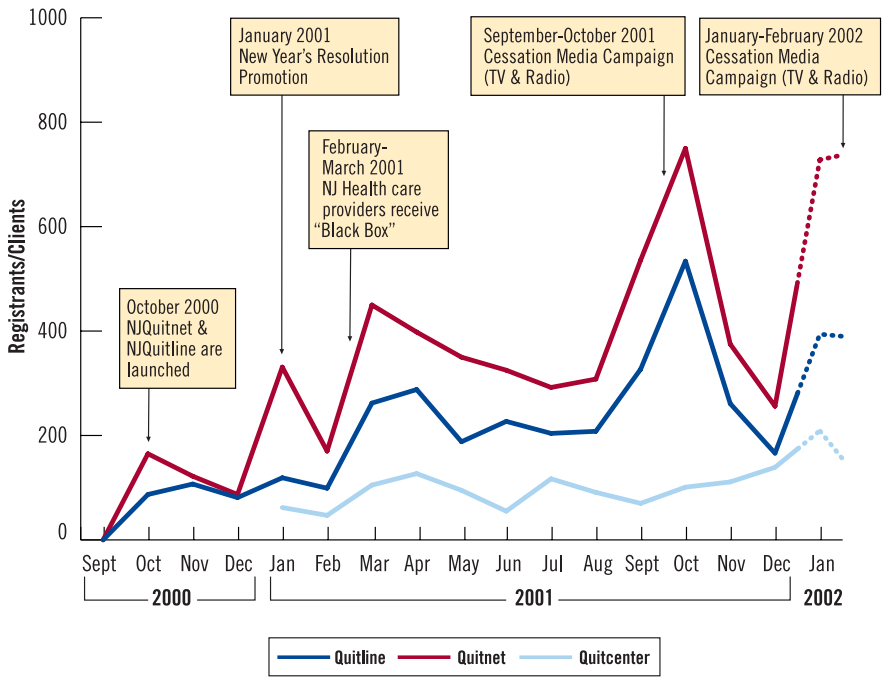
Community and Media Efforts

In September 2001, the CTCP launched a new series of quit ads ("Things Telling You") and added television advertising to the media mix for promotion of New Jersey Quitline and Quitnet. In total, the CTCP purchased 992 television spots, 8064 radio spots, and various newspaper and bus placements to promote its cessation services during 2001. In addition to other advertising and promotional activities, 19,000 cessation kits (a.k.a. "black boxes campaign") were distributed to healthcare providers to educate and encourage referral to the services. Community efforts included CAT coalitions distributing 21,671 promotional items for Quitline, Quitnet, and Quitcenters and fielding 365 referrals / requests for information for these services during 2001.

Awareness of Media Efforts

Despite these efforts, few New Jerseyans were able to confirm awareness of a Quit services advertisement by correctly describing the ad. Of adults able to confirm awareness of an anti-tobacco advertisement on the 2001 NJATS, only 7.5% (±2.0) identified one of the state's Quit services ads. For those who confirmed seeing a Quit

Figure 10: NJQuitnet registrants, NJQuitline clients and NJQuitcenter clients, Oct. 2000-Dec. 2001



service ad, 21% (±14.9) of those who identified a New Jersey Quit ad were smokers while 79% (±14.9) were non-smokers.

The data presented above were from the perspective of all adults in New Jersey, however, we also examined the impact of media efforts from the perspective of those smokers who sought out CTCP Quit services. Those contacting the various Quit services were asked how they heard about that service. CTCP's promotional media for these services included radio ads, which were run at various times over the year, and television ads that began in September 2001. Over 25% of clients over the one year period reported learning of the Quitline through a television or radio commercial. Other frequently reported sources included brochure/pamphlet (10%), newspaper/magazine (7%), doctor/nurse (7%), and family/friends (6%). Once television advertising began in September 2001, the proportion reporting television or radio as how they had heard of the service jumped to 50% for the last four months of 2001. New Jersey Quitnet registrant data showed similar trends, as displayed in Figure 10.

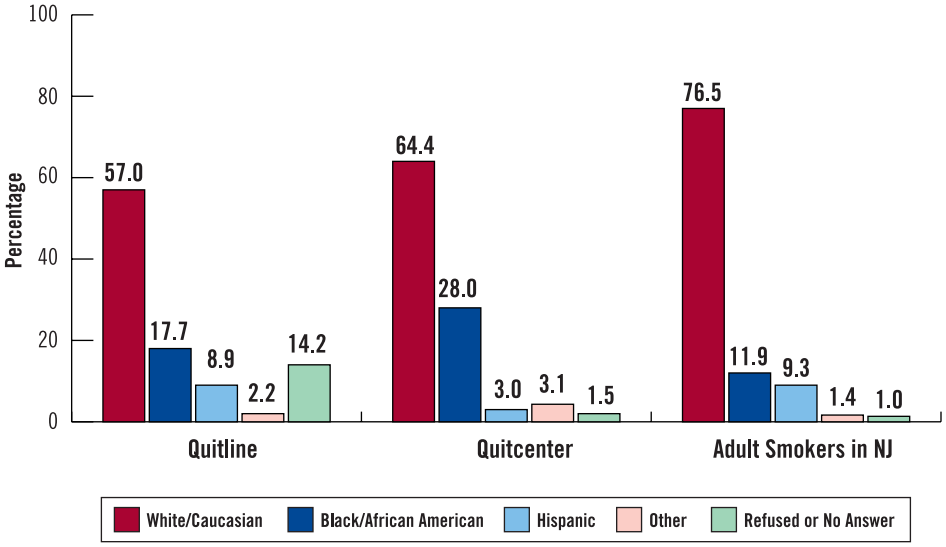
Utilization of Quit Services

Figure 10 depicts the utilization of the state's three cessation services - New Jersey Quitnet, New Jersey Quitline, New Jersey Quitcenters - since their inception. By the end of 2001, New Jersey Quitnet had over 266,000 visits to the site and 4534 New Jerseyans became registered users of the site to help them with their quit attempts. Additionally, 2751 smokers enrolled in New Jersey Quitline, the state's telephone cessation counseling service. Lastly, more than 1120 smokers sought in-depth smoking cessation counseling through the New Jersey Quitcenters.

The figure also highlights key events over the past year, most notably the state's media campaign efforts. When data regarding utilization of New Jersey's Quitnet, Quitline, and Quitcenters were plotted against the state's media efforts, there was an apparent relationship between concentrated media efforts and utilization of cessation services. This trend was most dramatic for New Jersey's Quitnet and Quitline.

Demographic characteristics of New Jersey's Quitline and Quitcenter clients were compared to the distribution of adult smokers in the 2001 NJATS.[v] As shown in Figure 11, white smokers were disproportionately not using Quitline and Quitcenter. In contrast, black smokers were using these Quit services at higher rates than one would expect given their current rate of smoking in the general population. While smokers in New Jersey were more likely to be male (55%) than female (45%), users of New Jersey Quitline and Quitcenters were more likely to be female (60% of Quitline users were female). Lastly, adult smokers with the highest prevalence rate - young adults - seemed to be underutilizing New Jersey Quitline and Quitcenters.

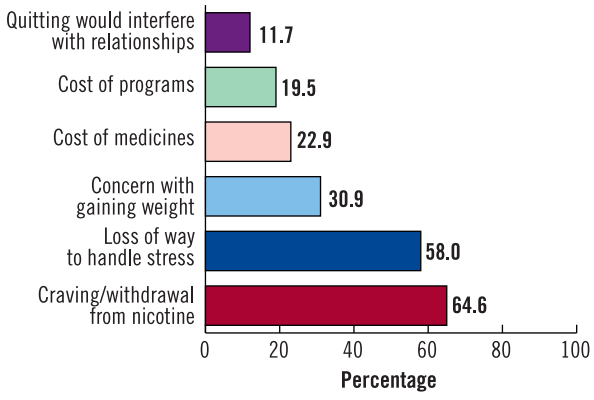
Figure 11: Racial/ethnic distribution of Quitline and Quitcenter clients versus NJ Smokers - NJ Quitline & NJ Quitcenter clients, 2001; 2001 NJATS



Barriers to Quitting

Cessation services are a significant component of the CTCP. Therefore, understanding the barriers to quitting among smokers is critical to maximizing program effectiveness. Barriers to quitting were assessed based on items from the 2001 NJATS. Current smokers reported reasons that might keep them from quitting. As shown in Figure 12, two thirds of smokers (65 ±3.7%) reported signs of nicotine dependence, such as having a craving for a cigarette or feelings of withdrawal, as the most common factor that might interfere with quitting. Also, more than half of smokers (58.0% +3.4) reported concern that by quitting they would lose a means to handle stress. Females (45.0 ±4.6%) were more likely than males (19.6 ±3.8%) to fear the risk of gaining weight and Hispanic smokers (33.9 ±11.8%) were more concerned about the cost of classes or other programs relative to white (18.0 ±2.9%) and black smokers (19.1 ±7.9%). Lastly, young adults were more concerned than any other

Figure 12: Reasons that keep adult smokers from quitting - NJATS, 2001



[v] Data on the utilization of New Jersey Quitnet by race were not available.

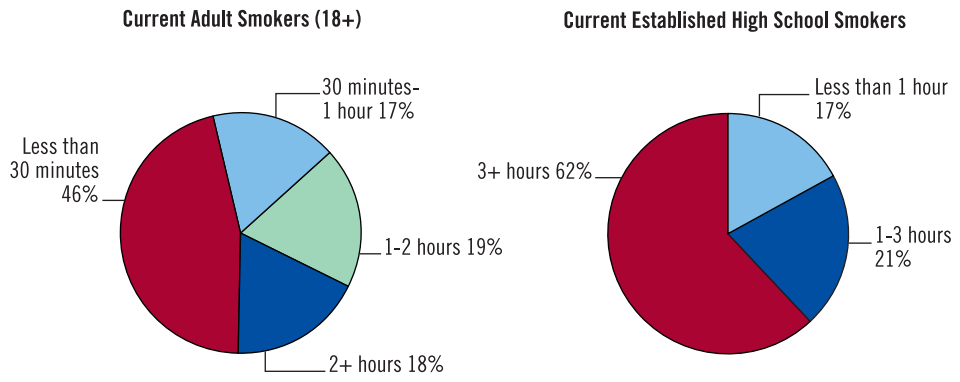
age group that quitting smoking would interfere with social relationships (19.3 ±5.4%). Fortunately, many of these perceived barriers such as concerns over withdrawal can be addressed by the CTCP promoting awareness of and increasing referrals to low or no-cost state cessation services, and by health care providers prescribing effective cessation medications.

Indicators of Nicotine Dependence

Adults

A common measure of nicotine dependence is how soon smokers have their first cigarette after waking up. The NJATS data, shown in Figure 13, indicated that almost half (46.2 ±3.4%) of adult smokers were highly dependent on nicotine, smoking within a half-hour of waking each morning. Older adults, aged 45 and up, were more likely to indicate smoking their first cigarette within a half-hour of waking (52.3 ±5.3%) compared to adult smokers under the age of 45 (40.6 ±4.4%). This finding was consistent with a low annual cessation rate among older adults (see page 35), suggesting smokers in older age groups were more apt to be chronic, heavy smokers and perhaps more reluctant to quit.

Figure 13: Indicators of nicotine dependence* among adult and high school smokers – NJATS, 2001; NJYTS, 2001



** Note: Adults were asked how soon they have their first cigarette upon waking; Youth were asked how long they could go before needing a cigarette*

Youth

Nicotine dependence is often mistakenly considered to be a problem only among adults. Therefore, most measures of nicotine dependence are based on the experience of adult smokers. Adult smokers were asked how soon after waking up they smoked their first cigarette. Since youth are likely to postpone their first cigarette until they leave their parents' home, the question was modified on the 2001 NJYTS to ask how long they go without smoking before they feel like they need a cigarette. Among high school students who currently smoke and have smoked 5 or more packs of cigarettes in their lifetime, there were strong indicators of nicotine dependence (see Figure 13). More than a third (37.5 ±7.8%) of current established high school smokers reported they could not go more than three hours before needing a cigarette. Nicotine dependence was even more prevalent among frequent smokers; almost half (46.5 ±8.9%) indicated not being able to go more than three hours without a cigarette.[vi]

[iv] Among youth, frequent smokers were defined as youth who reported smoking on 20 or more days of the 30 days preceding the survey.

Clinician Counseling for Tobacco Cessation

To monitor trends in clinician counseling for tobacco cessation, the U.S. Public Health Service's Clinical *Practice Guidelines for Tobacco Cessation* were considered.[16] The guidelines are intended to become part of standard care and recommend that clinicians treat patients using the "5 A's" (Ask, Advise, Assess, Assist, and Arrange). Providing smokers with treatment for tobacco dependence begins with asking or systematically identifying tobacco users at every visit to their physician.

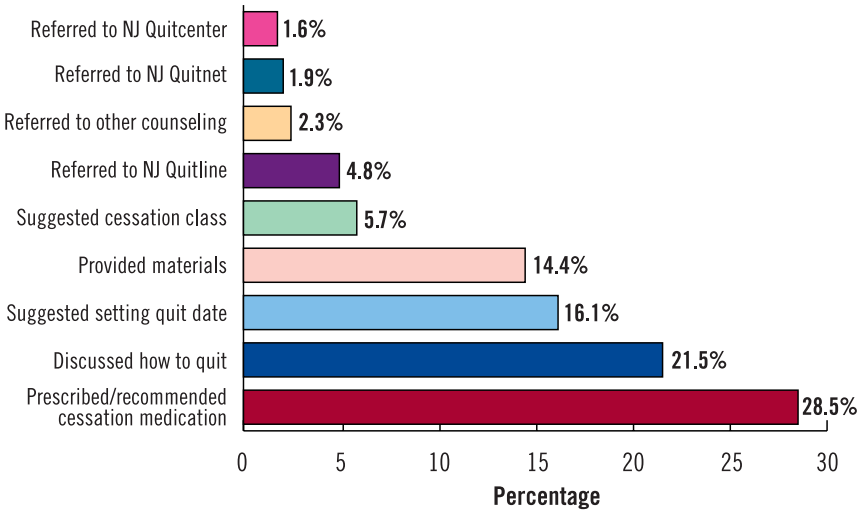
Adults

Based on the 2001 NJATS, two-thirds of *all* adults (66 ±3.1%) who visited a physician in the past year were asked about their smoking status. Physician identification of patients' smoking status differed by patients' tobacco use behavior. Recent quitters and current smokers (83 ±2.8%) were significantly more likely to be asked their smoking status than nonsmokers (61 ±2.5%).

A critical next step for clinicians is to advise or strongly urge all tobacco users to quit. Reviews show that clinician advice to quit alone may increase cessation rates by an additional 2.5%.[16,41] While this may seem a small difference, given that New Jersey has over one million smokers, the net effect on increasing cessation could be substantial. Results from the 2001 NJATS showed that 63.0% (±2.7) of current smokers and recent quitters who saw a health care provider in the last 12 months reported being advised to quit smoking.

Figure 14 summarizes physician assistance with smoking cessation for those smokers who reported being advised by their physician to quit. Approximately a quarter reported their provider either recommended or prescribed pharmacologic adjuncts for smoking cessation (28.5 ±2.4%). Roughly one in five (21.5 ±2.4%) reported that their provider discussed with them how to quit and 16.0% (±2.4) indicated their provider recommended setting a quit date. However, few smokers (8.6 ±2.4%) reported being referred to at least one of New Jersey's new cessation services by their physician (i.e., Quitline, Quitnet, Quitcenters).

Figure 14: Physician assistance with quitting among adult smokers and recent quitters who visited a physician in the past 12 months – NJATS, 2001



Youth

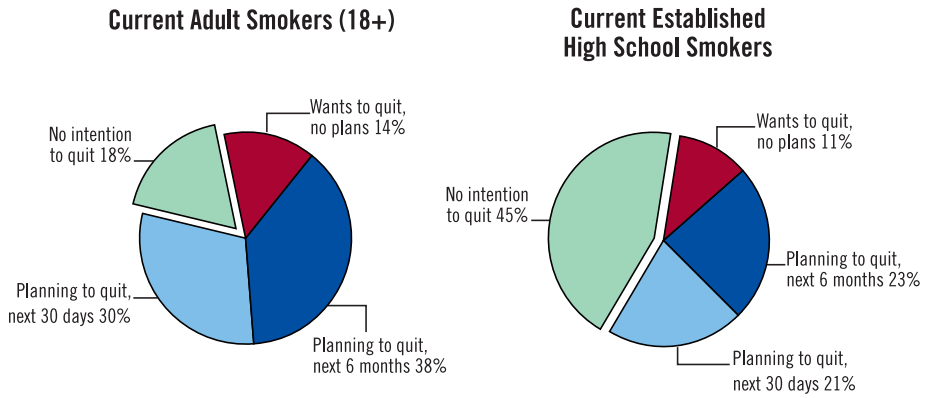
Roughly a third (35.9 ±3.5%) of all high school aged youth who reported visiting a physician in the past year were asked about their smoking status, according to the 2001 NJYTS. Among established high school smokers, 59.5% (±4.9) reported their physician asked whether or not they

smoke. Physician assessment could be low because some health care providers may rely on cues (e.g., smell) to determine smoking status among adolescents rather than ask each and every adolescent about their smoking history. The perception that youth would not disclose their smoking behavior may be a barrier to universal physician assessment; however, previous research indicates that as many as 80% of adolescent smokers would admit their smoking if asked.[42]

Intention to Quit

The 2001 NJATS and NJYTS asked current smokers about their desire to stop smoking cigarettes. The majority of adult (82 ±2.8%) and adolescent (54.9 ±8.3%) smokers reported wanting to stop smoking cigarettes. As shown in Figure 15, many smokers reported making plans to quit: 30% (±3.1) of adult smokers and 20.7 (±6.4%) of adolescent smokers planned to quit in the next 30 days while 38% (±3.4) of adult smokers and 23.1% (±3.9) of adolescent smokers indicated they were planning to quit in the next six months. Comparable data prior to 2001 were not available.

Figure 15: Smokers' readiness to quit among high school students and adults – NJATS, 2001; NJYTS, 2001



Quit attempts

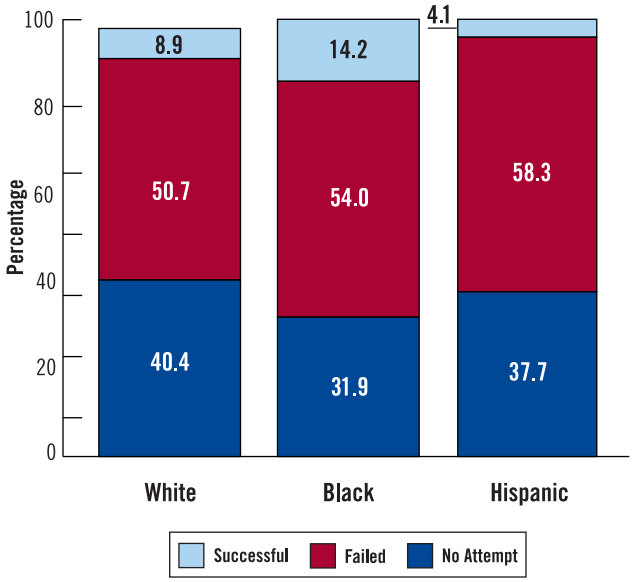
Quit attempts are the broadest measure of cessation activity. A quit attempt was defined as any quit attempt lasting one day or longer (i.e., successes and failures) in the past 12 months as reported by current smokers and previous year smokers (i.e., recent quitters).

Adults

Based on the results from the 2001 NJATS, almost two-thirds of current and previous year smokers (61.6 ±3.1%) in New Jersey made a serious quit attempt in the past year. Quit attempts decreased with age. Young adults (aged 18 to 24) reported a higher proportion of quit attempts (68.1 ±6.1%) compared to adults aged 25 to 64 (61 ±3.6%) and older adults, age 65 and over, had the lowest quit attempt rate (57.1 ±9.5%). As shown in Figure 16, black smokers had a higher proportion of quit attempts (68.1 ±9.2%) than white smokers (59.6 ±3.6%) and Hispanic smokers (62.4 ±10.9%), although the differences were not statistically significant. No significant differences were noted by gender.

Quit attempts significantly increased among adult smokers from 55.7% (±3.4) in 2000 to 61.6% (±3.1) in 2001, representing a 10.6% increase. While adult smokers in New Jersey appeared to be no more successful with quitting this year as compared to last year, more New Jerseyans attempted to quit smoking in 2001 compared to 2000.

Figure 16: Percentage of adults who attempted to quit during the 12 months preceding the survey, by race/ethnicity- NJATS, 2001



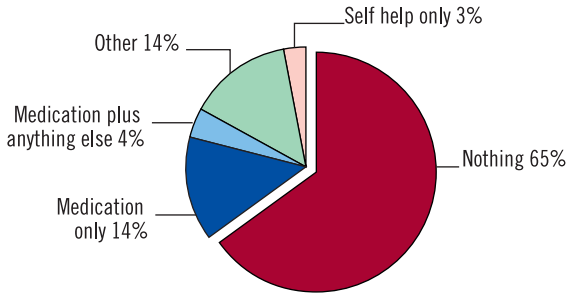
Youth

Because the NJYTS did not allow us to determine who was smoking in the previous year, quit attempts were reported for current smokers only. In 2001, almost half (56.9 ±4.8%) of current high school smokers reported seriously trying to quit smoking cigarettes in the 12 months preceding the survey. Differences were noted within racial/ethnic groups. In 2001, white youth smokers were less likely to report a quit attempt (53.9 ±7.9%) than both black (70.0 ±17.2%) and Hispanic youth smokers (62.8 ±11.2%).

Method of Cessation

Among adults who tried to stop smoking during the past year, 64.7% (±4.0) reported making the attempt to quit on their own with no assistance (see Figure 17). Among adults who tried quitting, 14.0% (±3.0) used medication alone, the most common method of cessation, while another 4.3% (±1.6) reported using medication in conjunction with a cessation class or program.

Figure 17: Method used for quit attempts among adults who tried to quit during the 12 months preceding the survey - NJATS, 2001



Quit Successes

Adults

According to the 2001 NJATS, twenty-nine percent (±1.8) of adults in New Jersey were former smokers. Quit success or cessation rates were calculated based on the proportion of previous year smokers (i.e., recent quitter) who quit within the 12 months prior to the survey. Specifically, a recent quitter was defined as someone who smoked 100+ cigarettes in a lifetime, reported currently smoking "not at all" and stopped smoking regularly less than 1 year ago.[17]

In 2001, the quit success rate among all adults was 9.2% (±2.4). Young adults had the highest rate of quitting (11.6 ±4.1%) while senior citizens (65 and over) had the lowest quit rate (8.1 ±9.6%); the quit success rate for adults aged 25-64 resembled the overall rate of 9.2% (±2.4). Older adult smokers (65+) represent a segment of the population that tends to be long-term addicted smokers since less dependent smokers have already quit.[43] As shown in Figure 16, black adults had the highest quit rate (14.2% ±7.7) while Hispanic smokers had an extremely low rate of quitting (4.1% ±3.8). No notable differences were detected by gender. Lastly, there were no significant changes in the overall quit rate since the 2000 NJATS, when the rate was estimated as 10.8% (±2.1).

Youth

Measuring quit success is more complicated for high school students. Quit successes were calculated based on the proportion of established smokers (100+ cigarettes in a lifetime) who had quit smoking cigarettes. Quitting was defined as not currently smoking (within past 30 days) and having quit smoking in the past six months. In 2001, 7.7% (±3.6) of established high school smokers quit smoking. Comparable data from 1999 was not available.

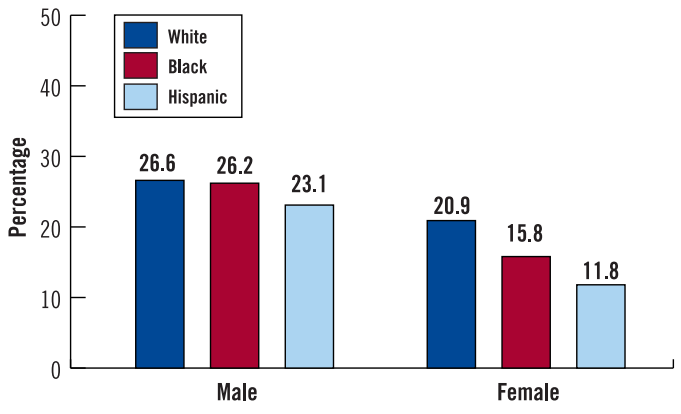
Prevalence of cigarette smoking

"The ultimate measure of success for a tobacco control program is the prevalence of cigarette smoking among the general population."[17] Smoking prevalence is a function of both prevention and cessation. Prevalence rates for youth and adults by demographic characteristics are presented in Appendix B, Table 2.

Adults

In 2001, 22.1% (+1.4) of New Jersey adults (aged 18 and over) were current cigarette smokers. Males were more likely to be current cigarette smokers (25.8 ±2.3%) than females (18.8 ±1.7%). While no significant racial/ethnic differences were present overall, there were dramatic racial/ethnic differences in current smoking within gender, particularly among females (see Figure 18). The current smoking rate among white females is significantly greater than Hispanic females.

Figure 18: Percentage of adults who were current cigarette smokers, by gender and race/ethnicity - NJATS, 2001

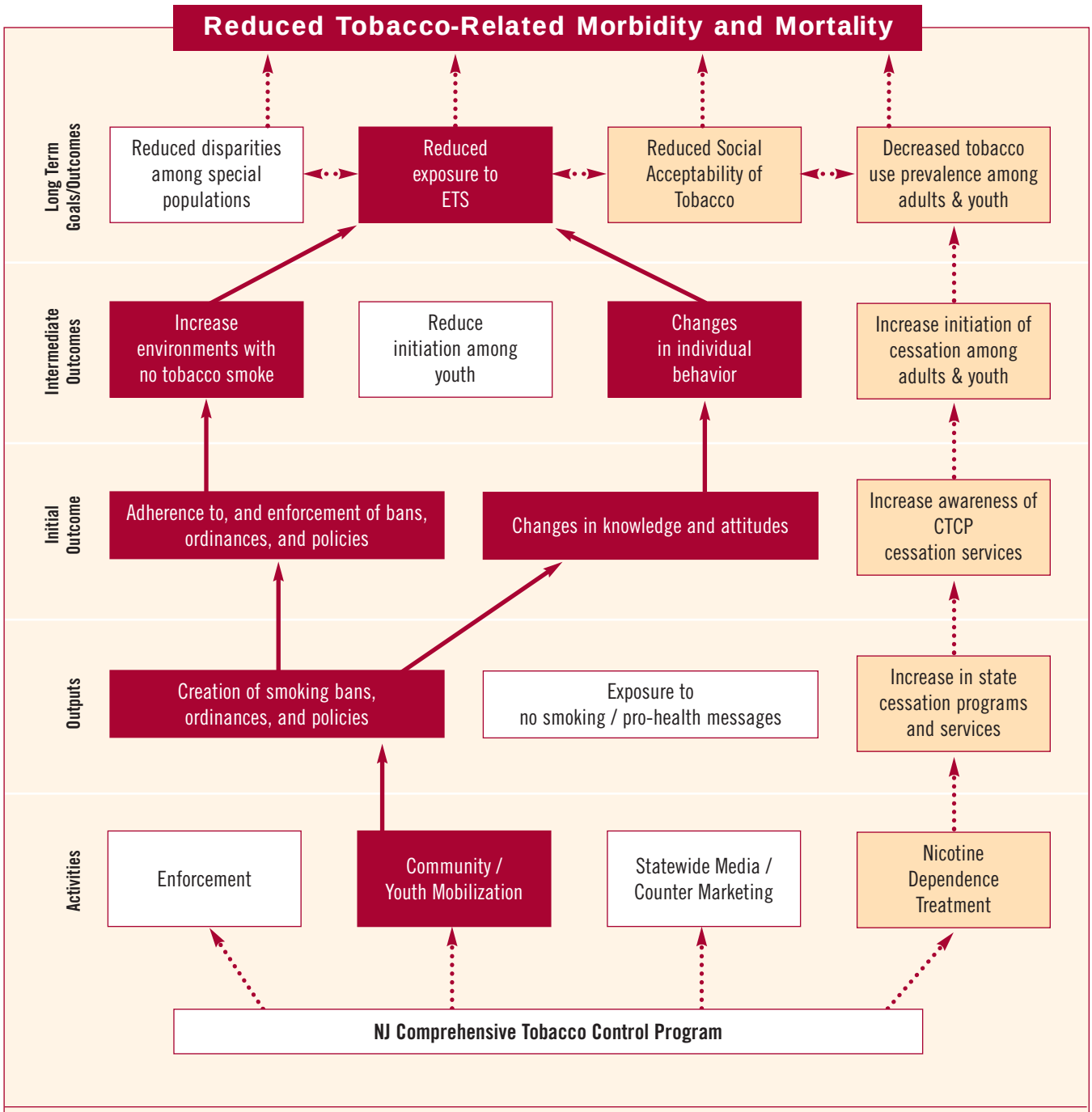


There was no significant difference in the overall rate of current smoking between 2000 (19.8 ±1.5%) and 2001 (22.1 ±1.4%). However, there was a significant change in smoking prevalence among older adults. Between 2000 and 2001, smoking prevalence significantly increased from 15.9% to 22.3% (±2.7) among adults aged 45 to 64 and from 7.7% (+2.0) to 13.5% (±2.7) among adults aged 65 and older.

The 2001 NJATS was carried out in the fall of 2001 and as such, we cannot present these estimates without some mention of September 11th. Recent studies have suggested a sizeable increase in the levels of stress, depression, anxiety, and associated substance use, including tobacco use, after September 11th.[19-21] Based on New Jersey Behavioral Risk Factor Surveillance System data, 17% of current smokers reported smoking more since the attacks.[22] However, it is unknown how many former smokers may have relapsed. Since older adults are more likely to be former smokers, having quit at an earlier age, it is plausible that this population was particularly vulnerable to relapse during this time.

Youth

Details on the prevalence of cigarette use among youth are discussed in detail under Section 1 (pages 23-27). In brief, the rate of current cigarette smoking among high school students is 24.5% (±2.8), according to the 2001 NJYTS. Racial/ethnic differences existed among youth with white and Hispanic high school students having significantly higher rates of current cigarette use compared to black high school students.



Note: *Adapted from CTCP Logic Model*

The CTCP utilizes a logic model to plan and direct various strategies to achieve the goal of **reducing exposure to environmental tobacco smoke**. The primary pathway for achieving the desired goal is highlighted and identified with solid lines. Since an effective tobacco control program utilizes a comprehensive approach, where all or most factors influence and reinforce one another, supporting factors are also identified with dashed lines.

SECTION 3: DECREASING EXPOSURE TO ENVIRONMENTAL TOBACCO SMOKE

Environmental tobacco smoke (ETS) represents a significant public health threat to both smokers and nonsmokers. Youth are particularly vulnerable to the adverse health effects of ETS exposure including an increased prevalence of pneumonia, bronchitis, coughing and wheezing, worsening of asthma, and middle ear disease.[44,45] Passive smoking also contributes to 3,000 lung cancer deaths annually in nonsmoking adults.[45] Policies that restrict or eliminate smoking in public places and workplaces have become more pervasive in recent years as the dangers of ETS exposure have been scientifically documented. The increasing number of clean indoor air laws reflect the growing concern for reducing widespread exposure to ETS. Previous research indicates strong public support, even among smokers, for smoke-free policies in various settings.[46]

In order to assess progress toward this goal, we examine activities and outputs in the logic model that influence ETS exposure such as the community efforts to change attitudes toward and create smoke-free policies. We also assess outcome indicators such as the prevalence of smoke-free policies at home, school, work, and other indoor environments in New Jersey as well as self-reported exposure among youth and adults.

Community Mobilization

Since CTCP's inception, community partners have conducted numerous activities targeted at reducing ETS. Twelve hundred employers/workplaces/restaurants and 141 managers of public places were contacted by Communities Against Tobacco (CAT) coalitions about the adoption of smoke-free policies during 2001. The Local Information Network Communication System (LINCS) reported the adoption of over 140 new worksite tobacco control policies in 2001. Restaurants and bars are among the most common sources of involuntary ETS exposure after home and work. LINCS reached out to 6300 restaurants to promote the adoption of smoke-free policies and conducted 230 meetings/seminars on smoke-free dining for restaurant owners. In addition, smoke-free recreation was widely supported by CAT and Youth programs' sponsorship of local smoke-free bowling, dining, or comedy events during 2001.

During 2001, 654 restaurants became smoke-free and 46 new policies were created on the restriction of the promotion, sale, distribution, and use of tobacco products according to LINCS reports. Figure 19 depicts the consistent growth of local ordinances related to tobacco use in various locations, as tracked

Figure 19: Cumulative local ordinances on tobacco use/ETS exposure - NJGASP, 1993-2001

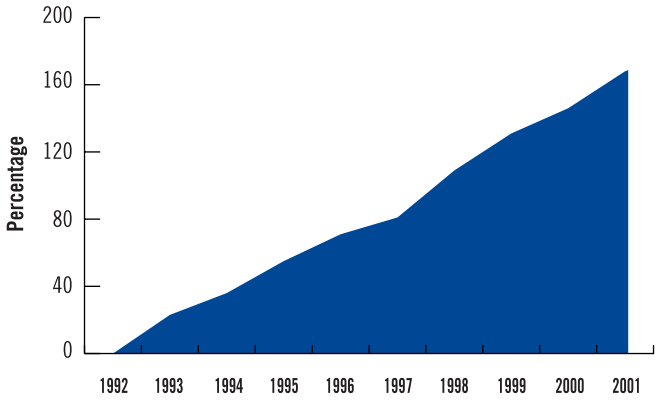
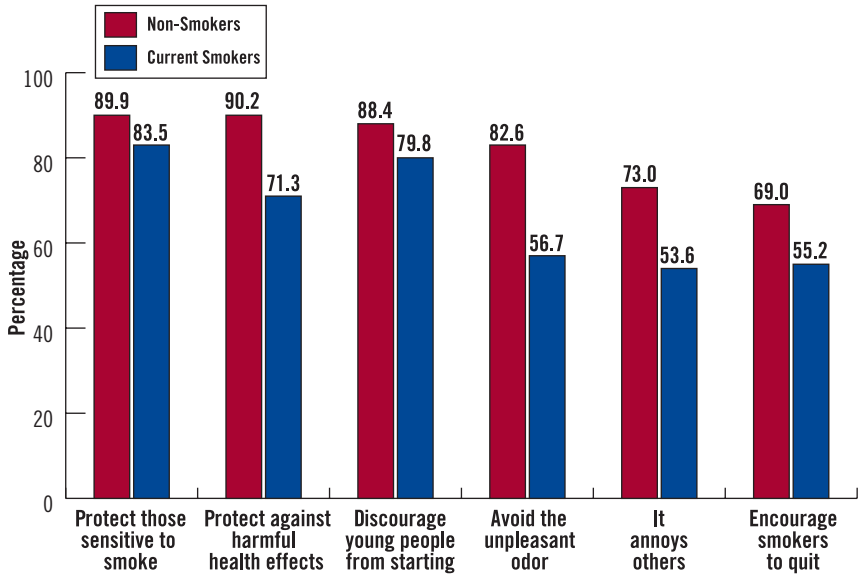


Figure 20: Reasons for having smoke-free homes by smoking status – NJATS, 2001



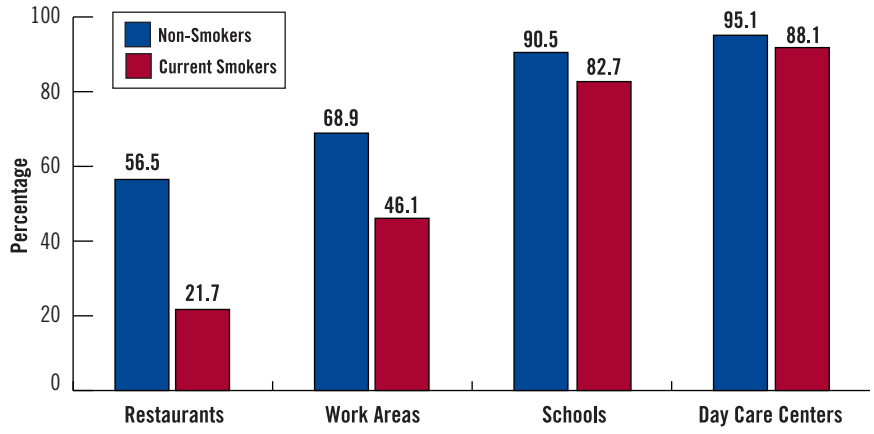
by NJGASP. These locations include government buildings, private workplaces, and restaurants as well as the outdoors.

Attitudes Towards ETS

The 2001 NJATS explored reasons why people have smoke free homes. Figure 20 shows the percent of adults that felt each reason was *very* important to them for their household. Most adults indicated that protecting family members from ETS was a very important reason for a smoke-free home. Many also felt it was very important to keep a smoke-free home to discourage youth from starting to smoke. Fewer adults felt that odor or the annoyance posed to others was a very important reason. Lastly, adults were less likely to feel that a very important reason for smoke free homes was to encourage smokers to quit. Smokers were significantly less likely than nonsmokers to attribute a high level of importance to all of these reasons.

As shown in Figure 21, current smokers were significantly less likely than nonsmokers to support a complete ban on smoking across various locations. However, there was widespread public support, even among smokers, for complete smoking bans in day care centers and schools. Additionally, the proportion of *smokers* who favored a smoking ban in work areas significantly increased from 37.6% (±3.5) to 46.1% (±3.4), a 22.6% increase from 2000 to 2001.

Figure 21: Percentage of adults who favor complete smoking ban in selected locations, by smoking status - NJATS, 2001



Results from the 2001 NJATS revealed that three-quarters of all adults (76.2 ±1.6%) preferred to sit in the nonsmoking section of a restaurant while 14.8% (±1.4) had no preference and 9.0% (±1.0) preferred

the smoking section. Even among current smokers, 32.1% (±3.2) preferred to be seated in a nonsmoking section and 30.0% (±3.2) had no preference while the remaining third usually preferred to be seated in the smoking section.

ETS at School

According to the 2002 NJSHEP, the majority of schools (96.4 ±2.0%) reported having policies in place that prohibited the use of cigarettes by students at school. However, only 42% (±5.3) of schools met the criteria for a comprehensive or 100% tobacco-free policy. A 100% tobacco-free policy is defined as a policy that prohibits the use of all tobacco products by everyone (i.e., students, faculty and visitors), in all locations (i.e., indoors, on school grounds, in school vehicles, and at school sponsored events), 24 hours a day.

It should be noted that changes in the SHEP instrument from 2000 to 2002 resulted in a more rigorous measure of a comprehensive policy in 2002 relative to 2000, which did not include visitors or 24 hour enforcement. However, if the 2000 definition were applied, more than half of schools (54.5 ±5.3%) met these criteria, a 67.2% increase since 2000 when only one out of three schools (32.6 ±5.1%) had a comprehensive tobacco control policy. A 2001 state law prohibiting tobacco use anywhere in a public school building and its grounds (NJA 26:3D-17a) may have been the catalyst for this marked increase.

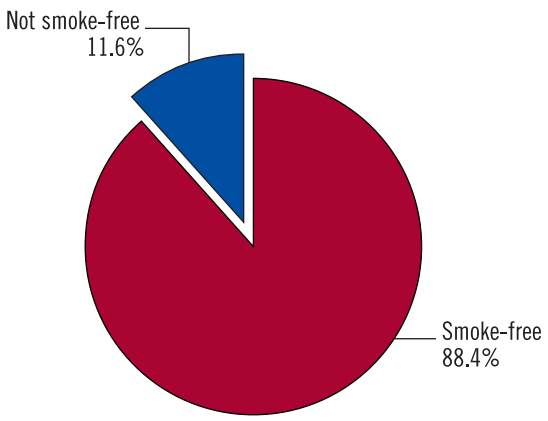
ETS at Work

Research has demonstrated that policies that ban smoking in the workplace are an effective public health measure for decreasing ETS exposure among nonsmokers and increasing cessation among smokers.[47-49] Data on worksite smoking policies were obtained from both the employee (NJATS) and employer (NJWTS).

The workplace is a common source of ETS exposure among adults. Self-reported data from the 2001 NJATS revealed 77.3% (±2.3) of adults reported their workplace had a smoke-free policy for public areas. Adults who worked in restaurants and bars (36.3 ±11.5%) were less likely to report having a smoke-free workplace policy relative to adults who worked in other settings. Employees in work settings such as plants/factories (66.2% ±9.1) and stores/warehouses (71.8 ±6.7%) were also less likely to report having a smoke-free policy than employees in other work settings such as offices (85.1 ±2.9%), hospitals (88.6 ±6.5%), and classrooms (93.7 ±3.5%). There were no significant changes in the prevalence of workplace policies from 2000 to 2001.

Data from the 2001 NJWTS provided baseline information on tobacco policies as reported by New Jersey workplaces. The clean indoor air law of New Jersey currently defines a smoke-free workplace as a place of work that has a total ban on indoor smoking *or* prohibits smoking in all indoor work, public and common areas and restricts smoking to designated fully enclosed and separately ventilated locations (NJSA 26:3D-23 thru 25).

Figure 22: Smoking policies in workplaces - NJWTS, 2001



Overall, 88.4% (±3.5) of all workplaces reported being smoke-free (see Figure 22). More specifically, 87.3% (±3.7) of all workplaces had a total ban on indoor smoking (i.e., smoking was not permitted anywhere indoors) while 1.1% (±1.2) of all workplaces severely restricted indoor smoking to such a degree that they met the existing definition of a smoke-free workplace (i.e., permitted smoking indoors but only in designated, fully enclosed and separately ventilated areas).

Smoke-free workplaces also differed by workplace size and type of industry. Small and medium sized workplaces (i.e., less than 249 employees) were less likely to report being smoke-free (88.6 ±4.0%) compared to larger workplaces (93.8 ±3.0%). Industries such as manufacturing, accommodation/food services, and mining/manufacturing/construction were less likely to have smoke-free workplaces compared to industries such as health, education, and professional/technical services (see Appendix B - Table 4).

These findings from the NJWTS were relatively consistent with results from the NJATS that indicated blue-collar work settings such as plants/factories were less likely to ban smoking in the workplace than white-collar work settings like offices and classrooms. However, for other work settings, the rates of smoke-free policies as reported by adults on the NJATS were consistently lower than those reported by employers on NJWTS. The differences in the data reported by the employee and workplace may differ for several reasons, including the level of awareness of the workplace smoking policy and the frequency of observing noncompliance.

Employees can also be exposed to ETS at building entrances, outdoor areas, and/or company vehicles even when company buildings are smoke-free. Only 8.0% (±2.9) of all workplaces prohibited smoking outside of buildings. Of workplaces that used company vehicles, 37.7% (±7.3) permitted smoking in company vehicles. Similar to schools, a 100% tobacco-free workplace policy should be one that bans all tobacco products in all locations.

Compliance/Enforcement

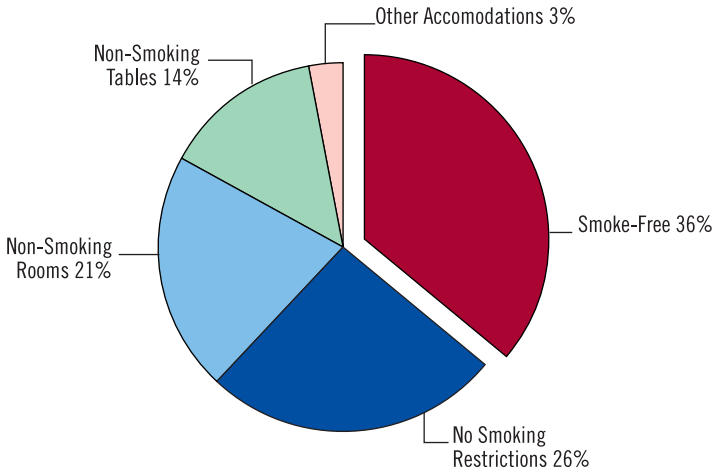
While the majority of workplaces reported being smoke-free, only half of these smoke-free workplaces (52.5 ±6.1%) had a written policy mandating a smoke-free environment. New Jersey law requires private employers with 50 or more employees to establish written rules to protect employees from ETS. Of workplaces with 50 or more employees, 77.9% (±4.4) reported having a written policy prohibiting smoking or limiting use to designated areas.

More than three out of four (78.5%) workplaces with smoking restrictions reported that employees always complied with the workplace smoking policies. About half (46.8 ±5.8%) of workplaces with smoking policies had disciplinary procedures for policy violation. The most frequently reported procedures for enforcing workplace smoking policies were verbal warnings (96.4 ±3.7%), a note placed in the personnel file (80.0 ±7.4%), and written warnings (76.2 ±8.0%). Very large workplaces were more likely to have disciplinary procedures compared to small workplaces (73.4% ±6.4 vs. 43.7 ±6.8%), and were also more likely to refer violators to a smoking cessation program (50.2 ±8.7% vs. 29.0 ±9.2%). About one quarter (27.6 ±7.9%) of workplaces with disciplinary procedures invoked at least one procedure in the previous 12 months.

ETS at Eating and Drinking Establishments

Smoking in bars and restaurants continues to be a controversial issue across the state and nationwide. Data previously presented from the 2001 NJATS and NJWTS indicated that employees who work in a restaurant/bar setting were less likely to be protected by a smoke-free workplace policy compared to other work settings. Given the nature of their workplace, restaurant and bar workers are disproportionately affected by ETS. Even among patrons, restaurants and bars are likely to be one of the most common sources of involuntary ETS exposure after home and work. Research has found that levels of ETS in restaurants and bars were 1.5 times higher and 4.4 to 4.5 times higher, respectively, than in residences with one smoker.[50] Data from the 2001 NJEDTS provided baseline information on smoking policies among restaurants and bars in New Jersey as reported by owners and managers.

Figure 23: Smoking policies in eating and drinking establishments - NJEDTS, 2001



As shown in Figure 23, more than a quarter of eating and drinking establishments (26.5 +10.5%) had no smoking restrictions at all while roughly one third made some accommodations for nonsmokers by providing nonsmoking tables or rooms or making other accommodations. About one third (36.2 +10.8%) of establishments were smoke-free.[vii] These findings from NJEDTS were similar to data from the NJATS reported earlier, which indicated that 37% of adults working in restaurants/bars reported that their work environment was smoke-free.

[vii] A smoke-free eating and drinking establishment was defined as an establishment having a total ban on smoking indoors.

Smoking policies varied by the seating capacity of the establishment. Establishments with no smoking restrictions tended to be smaller (median of 35 seats) while completely smoke-free establishments were more apt to be medium-sized establishments (median of 50 seats). Establishments that accommodated smokers and nonsmokers were more likely to be larger (median of 100 seats).[viii]

Smoke-free policies varied by type of establishment. No bars or taverns reported being smoke-free while 43.8% (±20.2) of fast food / takeout restaurants, 35.9% (±15.4) of casual / family dining restaurants, and 37.2% (±28.7) of fine dining establishments were smoke-free.

The majority of smoke-free eating and drinking establishments felt that a smoke-free policy was good for business (60.9 ±18.0%) or made no difference (27.8 ±16.2%) while only 9.6% (±12.3) felt that the policy was bad for business. Similarly, most establishments offering non-smoking areas believed that offering these areas was either good for business (54.4 ±17.0%) or made no difference (37.9 ±16.8%) while only 6.7% (±11.2) thought that offering non-smoking areas was bad for business.

ETS at Home

Household smoking restrictions are an important step toward limiting a person's exposure to ETS. Based on the 2001 NJATS, approximately one out of six adults (16.7 ±1.4%) reported having *no* rules about smoking in their home and a similar proportion (16.9 ±1.4%) allowed smoking *at least* some times or in some places within their home. Roughly two-thirds of adults indicated that smoking was not allowed anywhere in their home (66.3 ±1.8%). Household smoking restrictions as reported by adults in New Jersey were largely unchanged relative to 2000.

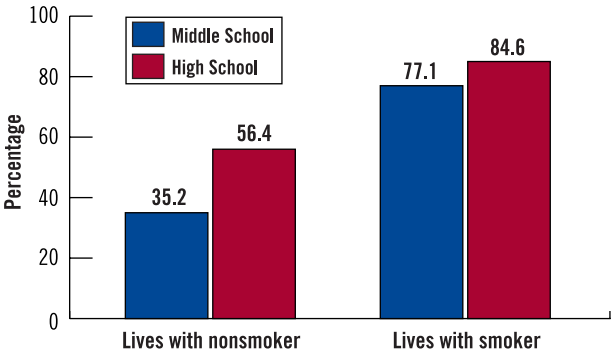
Roughly a quarter of households (27.4 ±2.6%) with children under the age of 18 reported permitting smoking *at least* some of the time or in certain places. Households with children were significantly more likely to be smoke-free than households with no children. Nearly three-quarters (72.6 ±2.6%) of households with children under 18 completely banned smoking from their home while 61.6% (±2.5) of households with no children banned smoking.

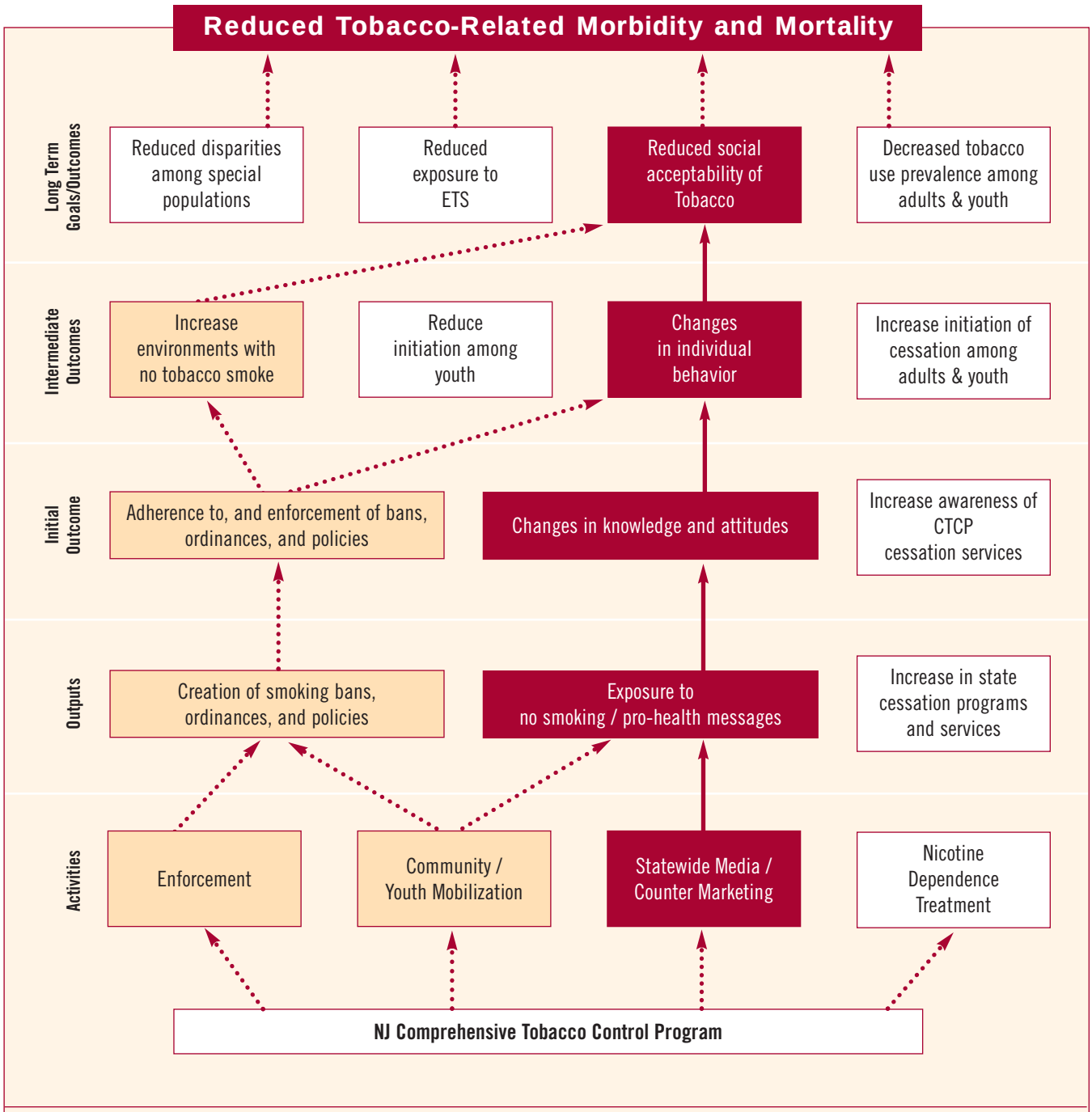
A better estimate of ETS exposure in the home is obtained by asking adults directly about the presence of smoking in their homes. Roughly a quarter of adults (25.8 ±2.1%) reported someone, including him or herself, smoked inside their homes during the 30 days preceding the survey. One in five households with children (19.7 ±2.2%) reported someone smoking inside their home in the past 30 days. There were no changes in 30-day exposure to ETS in households from 2000 to 2001.

[viii] The median is reported because the number of seats per eating or drinking establishment varied substantially. The median score represents the halfway mark. That is, half of the establishments had fewer seats than the median number reported and half had a greater number.

According to the 2001 NJYTS, 52.1% (±4.0) of middle school students and 69.4% (±3.8) of high school students reported being exposed to ETS in either rooms or in cars in the seven days preceding the survey. Furthermore, 42.9% (±3.4) of all students lived with someone who smoked cigarettes. Although self-reported ETS exposure among middle school students significantly declined by 13.8% from 1999 to 2001, self-reported ETS exposure among high school students and the proportion of students who lived with someone who smoked remained largely unchanged. Not surprisingly, both middle and high school students who lived with a smoker were more likely to report exposure to ETS than students who did not live with a smoker (see Figure 24).

Figure 24: Percentage of middle and high school students who were exposed to environmental tobacco smoke by living with a smoker - NJYTS, 2001





Note: *Adapted from CTCP Logic Model*

The CTCP utilizes a logic model to plan and direct various strategies to achieve the goal of **decreasing the social acceptability of tobacco**. The primary pathway for achieving the desired goal is highlighted and identified with solid lines. Since an effective tobacco control program utilizes a comprehensive approach, where all or most factors influence and reinforce one another, supporting factors are also identified with dashed lines.

SECTION 4: DECREASING THE ACCEPTABILITY OF TOBACCO USE

Decreasing the acceptability of tobacco use is an important and necessary component of the CTCP's efforts to accomplish its goals. Efforts to prevent youth tobacco initiation, increase cessation, and reduce ETS are all aided by the denormalization of tobacco use. Components of the CTCP that are expected to impact the social acceptability of tobacco use among New Jersey residents include media campaigns focusing on youth prevention and cessation, active and coordinated community-based programs, and policy and advocacy initiatives. In addition, state and local public relations efforts promote CTCP programs and reinforce tobacco control messages through news media. A number of indicators that capture the social acceptability of tobacco have already been discussed in Sections 1 through 3 such as REBEL membership, utilization of Quit services, and attitudes toward smoke-free policies.

In this section, we examine indicators relating specifically to media and promotional activities of CTCP, other tobacco control efforts and those of the tobacco industry. These include anti-tobacco promotional activities, attitudes toward tobacco industry practices, pro-tobacco advertising and promotion, and newspaper coverage of tobacco control. Data were collected from multiple surveillance tools including the NJATS, NJYTS, the PEP, and the Media Tracking Study.

Community Mobilization

Effective tobacco control initiatives rarely address only one CTCP goal. The previously mentioned community activities discussed in the context of preventing youth initiation, increasing cessation, and reducing ETS also contribute to changing the social norms around tobacco use. In addition, CAT, LINCS, and Youth Coordinators conducted over 1500 presentations during 2001 geared toward changing tobacco-related social norms. A total of 152 media actions were organized by CAT and LINCS in the second half of 2001. Fifty-five CAT activities focused on multicultural or special interest populations, while LINCS Coordinators addressed 122 ETS-related complaints. In addition, 260 new community organizations joined their local CAT coalitions in 2001.

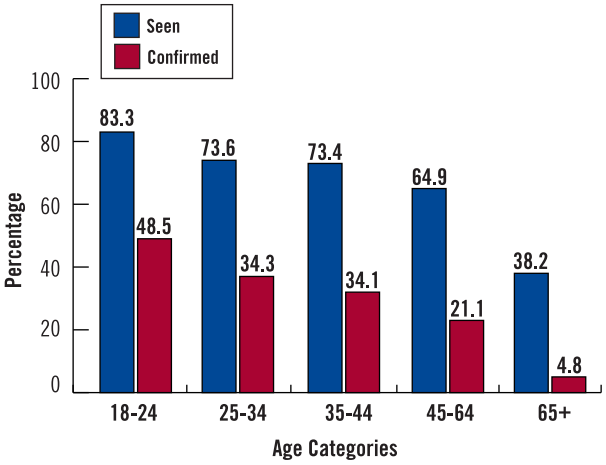
Anti-tobacco Media Efforts

Adults

The media section of the 2001 NJATS measured New Jersey residents' awareness of anti-tobacco advertising as well as attitudes toward selected tobacco industry practices.

Based on the 2001 NJATS, 65.8% (±1.9) of adults reported having seen an anti-tobacco ad in the six months preceding the survey and 26.5% (±1.7) were able to confirm this exposure by accurately describing an advertisement. When responses were examined by age group, reported exposure and confirmed awareness was highest in young adults and decreased steadily in older groups. As shown in Figure 25, 83.3% (±2.8) of 18-24 year olds reported having seen an anti tobacco ad and 48.5% (±3.7) were able to accurately describe an ad.

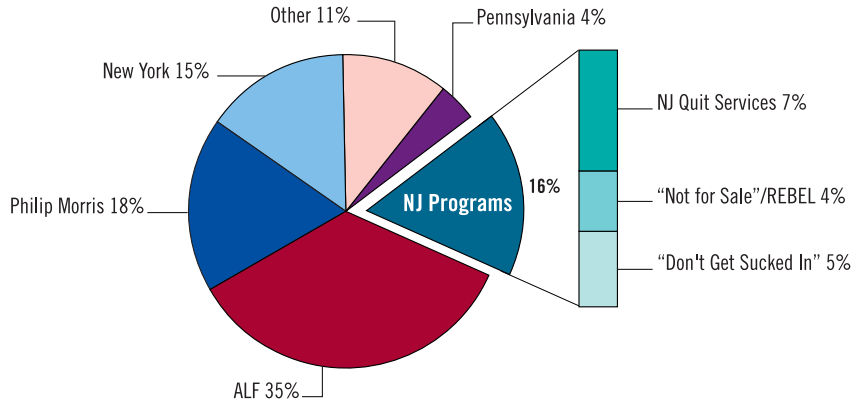
Figure 25: Anti-tobacco ad awareness by age group - NJATS, 2001



Over three-quarters of 25-34 year olds (73.6 ±4.4%) and 35-44 year olds (73.4 ±3.9%) reported having seen an ad and more than one-third in each group confirmed their awareness. Reported and confirmed awareness was slightly lower in 45-64 year olds and lowest in those 65 years and older.

Survey responses were examined according to the sponsor of the anti-tobacco ad identified by the respondent. Of all adults who first reported having seen an anti-tobacco advertisement and then confirmed awareness by correctly describing an advertisement, 16.1% (±2.8) of them identified a CTCP ad (see Figure 26). Specifically, 7.5% (±2.0) identified one of the state's Quit services ads, 3.8% (±1.5) identified a "Not for Sale" / REBEL ad, and some respondents (4.8 ±1.5%) were still able to identify the "Don't Get Sucked In" billboard ads placed immediately following the Master Settlement Agreement's (MSA) ban on tobacco company billboard advertising in 1998. Other sponsors identified were the American Legacy Foundation (ALF)'s "Truth" and "Great Start" ad campaigns (35.0 ±3.4%) and Philip Morris "prevention" ads (18.4 ±3.0%), both of which ran advertising more frequently than CTCP. Participants also identified ads sponsored by New York and Pennsylvania.

Figure 26: Percentage of confirmed ads by sponsor – NJATS, 2001



Attitudes Toward Tobacco Industry Practices

Tobacco industry marketing has been shown to affect initiation and consumption among youth and adults.[51-53] Both the NJYTS and NJATS measure attitudes and perceptions about tobacco marketing.

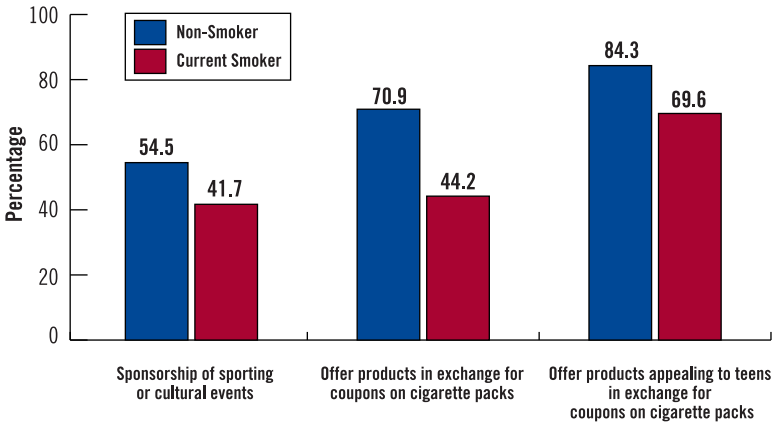
Adults

The 2001 NJATS asked residents a set of questions designed to assess attitudes toward tobacco industry practices, including industry sponsorship of sporting or cultural events, pack-based incentive programs, and coupons and give-aways targeted to teenagers.

Over half (51.6 ±2.1%) of New Jersey residents felt that the tobacco industry should not be allowed to spon-

sor sporting and cultural events and 65.0% (±1.9) opposed pack-based incentives such as clothing or camping equipment. Eight in 10 adults (81.1 ±1.5%) felt that tobacco companies should not be allowed to distribute coupons and give-aways targeted to teenagers. As shown in Figure 27, these attitudes differed by smoking status. Not surprisingly, smokers were more supportive of all forms of tobacco marketing relative to nonsmokers. Among smokers, 41.7% (±3.5) opposed tobacco industry sponsorship of sporting or cultural events while more than half of nonsmokers opposed industry sponsorship (54.5 ±2.5%). Smokers (44.2 ±3.4%) were less likely to be opposed to product offers in exchange for coupons on cigarette packs than non-smokers (70.9 ±2.2%). However, both smokers (69.6 ±3.2%) and non-smokers (84.3 ±1.7%) expressed opposition to the tobacco industry offering products that appeal to teens in exchange for coupons on cigarette packs.

Figure 27: Percentage of adults opposed to tobacco marketing practices, by smoking status - NJATS, 2001



Youth

The 2001 NJYTS asked students whether they thought tobacco companies try to get youth to initiate smoking through the use of advertising, as well as by misleading people to buy their products. The majority of middle school (88.0 ±1.6%) and high school students (85 ±2.0%) agreed with the statement that tobacco companies used attractive advertisements to encourage young people to start smoking. Furthermore, 87.7% (±1.7) of middle school and 86.2% (±2.1) of high school students believed that tobacco companies have tried to mislead people to buy their products. There were no significant changes in middle and high school students' attitudes regarding tobacco industry marketing between 1999 and 2001.

Another item on the 2001 NJYTS addressed whether youth would ever wear apparel depicting a tobacco company name or picture. In 1999, 43.2% (±1.8) of middle school and 33.3% (±1.9) of high school students answered that they would "definitely not" wear tobacco industry branded merchandise. In 2001, 52.2% (±2.3) of middle school and 37.6% (±2.4) of high school students reported that they would "definitely not" wear tobacco industry branded merchandise. While this may suggest a decreased acceptance of tobacco industry branded merchandise, it also may be partly attributed to a reduction in the amount of tobacco branded clothing and merchandise available. As of June 30, 1999, the MSA prohibits the distribution of tobacco merchandise displaying a tobacco brand or logo through incentive programs.

Pro-tobacco Advertising and Promotions

Tobacco companies continue to battle for cigarette brand market share. Between 1999 and 2000, tobacco industry advertising and promotional expenditures rose 16.2% to $9.57 billion.[54] It is estimated that annual-

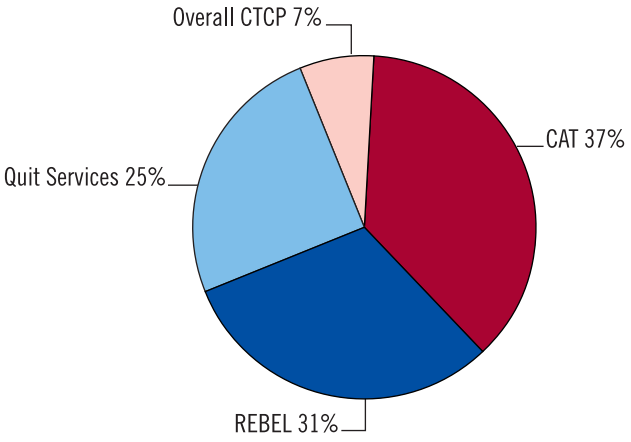
ly $246.8 million of these expenditures are directed at New Jersey residents.[55] The tobacco industry has shifted the advertising and promotional methods used to appeal to the public in response to the marketing guidelines detailed in the MSA. Recent approaches include the use of direct mail, bar/nightclub marketing, and Internet based e-mail promotions.

The 2001 NJATS found that 16.4% (±1.4) of adults reported having received mail addressed to them from a tobacco company. When asked if they had attended a tobacco industry sponsored concert or cultural event, only a small percentage of adults (3.0 ±0.7%) reported that they attended. Over twenty percent of New Jersey adults had seen products displaying a tobacco company brand or logo in restaurants, bars, or clubs (22.2 ±1.6%) or had purchased or received an item that has a tobacco company brand name or picture on it (20.6 ±1.5%). Questions on participation in tobacco industry marketing were asked only of 18 to 34 year olds on the 2000 NJATS. Comparison between 2000 and 2001 NJATS findings suggest that participation in certain tobacco promotions among this age group is decreasing. However, the differences may be due solely or in part to changes in tobacco marketing due to MSA restrictions. Continued monitoring through future administrations of NJATS will allow for better identification of changes in these practices as well as new industry tactics.

Newspaper Coverage of Tobacco Control

Analysis of newspaper content provides a snapshot of New Jersey residents' exposure to tobacco-related issues. In addition, it allows for tracking of CTCP public relations efforts, which are a major component of CTCP media efforts. These efforts promote CTCP programs on the local and state level while striving to maximize "free media" through the use of press releases and event planning. Accordingly, the Media Tracking Study allows a closer analysis of frequency and content of "free media" coverage as well as media advocacy efforts.

Figure 28: Percentage of newspaper articles by CTCP initiative, Sept. 2000 - Dec. 2001



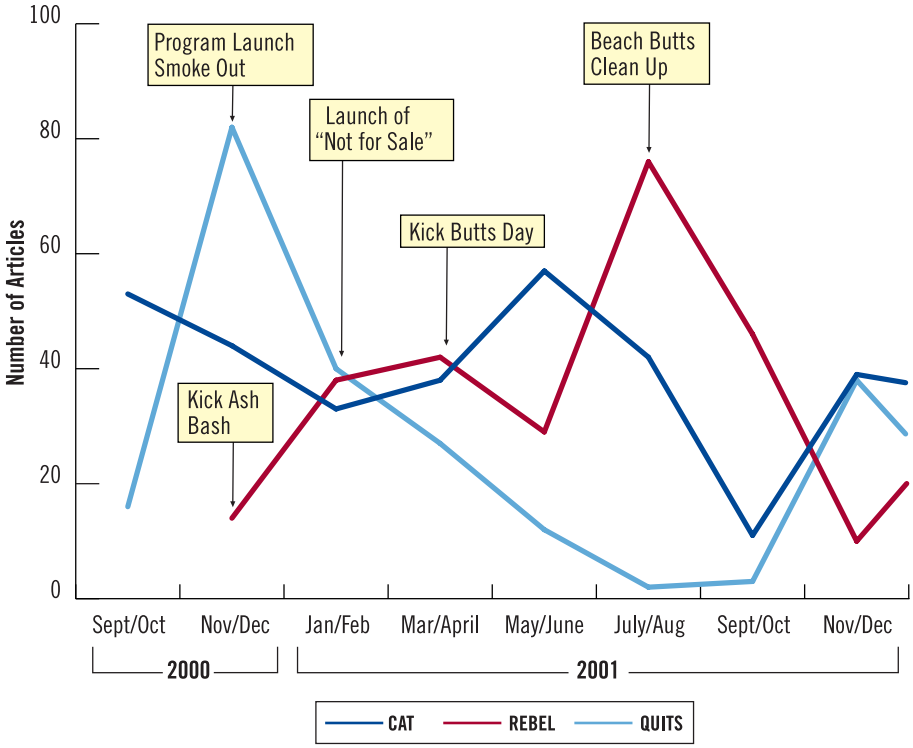
A total of 2,845 tobacco-related newspaper clippings from 253 different publications were identified during a 16-month clipping period (September 1, 2000 to December 31, 2001). The majority of clippings were published in non-daily papers (55%) and most (66%) were general news/feature articles as opposed to editorial columns (10.2%), letters to the editor (7.3%), listings/announcements (13%), and cartoon/photo only (3.5%). Items coded as duplicates (i.e., same body text printed in different regional versions of a single paper) accounted for 22% of all items.

When examining the main topic of the news coverage, tobacco control was the most frequent (28%), followed by cessation (22.5%), ETS (17.2%), prevention (16.1%), and the tobacco industry (9.7%). Further detailed coding was conducted for items about a CTCP program. A total of 831 clippings (29.2% of all clippings) were specific to the CTCP. Of these CTCP specific clippings, CATS were coded as the largest number of articles, followed by REBEL, New Jersey Quit services, and overall discussion of the comprehensive program (see Figure 28).

Since items promoting services are most useful if they contain information on how to contact these services, CTCP-related clips were also examined for inclusion of contact information, in the event that a reader wished to take action. Overall, 68% of CTCP-related articles were found to contain contact information and 91.0% of items on the Quit services contained contact information.

The 16-month clipping period captured several important events for the CTCP, including the launch of NJ Quit services, the launch of REBEL and the "Not for Sale" media campaign, and the expansion of the CAT program and its community-level efforts. When the number of items relating to CAT, REBEL, and Quit services is plotted against the dates of relevant events and media activities, there is an apparent link between the level of media coverage and CTCP promotional and advocacy efforts. Specifically, as shown in Figure 29, the number of newspaper items for specific CTCP programs increased in response to CTCP promotional efforts for that program.

Figure 29: Newspaper articles by CTCP initiative, Sept. 2000 - Dec. 2002



Given the importance of newspaper coverage in generating interest in tobacco control and utilization of services, statewide public relations efforts should continue to be a major component in CTCP media efforts.

RECOMMENDATIONS

In two years, the CTCP has laid the foundation for a sound tobacco control infrastructure for New Jersey. Having emerged as one of the nation's new leaders in tobacco prevention, the New Jersey CTCP must now work to focus its efforts and maximize resources in order to achieve successful and sustainable results. One purpose of evaluation is to use the information collected to improve program efforts. The recommendations below are derived from the evaluation findings in this report as well as previous research on what works in tobacco control.

New Jersey's anti-tobacco advertising campaign targeted to youth needs to be maintained at a high and consistent level

To build on the initial success of the REBEL movement and the "Not for Sale" media messages, advertising targeted to youth must be constant. Despite the cost, network and cable television advertising is perhaps the most effective way to reach the largest number of youth. While it is ideal to use a multi-media approach, constraints on funding warrant the use of media channels with the greatest reach. Given the cost of television advertising and the reality of limited budgets, it is important to minimize production costs and maximize exposure.

Incorporate evidence-based curricula into comprehensive school-based tobacco prevention programs

An essential element of a comprehensive tobacco control approach - school based programs - has remained largely undeveloped in New Jersey. Efforts to reduce youth tobacco use could be enhanced by incorporating evidence-based tobacco prevention curricula into a comprehensive school program based on CDC's Guidelines for School Health Programs to Prevent Tobacco Use and Addiction.[56] These guidelines also provide advice for tobacco-free school policies and improving links between youth, parents, and community organizations.

Strengthen community relationships to facilitate complete and sustained compliance with tobacco age of sale laws

CAT coalitions can provide a common ground for merchants, local health departments, and community members to work together to control minors' access to tobacco. Agencies were more likely to conduct compliance checks when they reported collaboration with other community agencies to enforce youth access laws, and believed that youth access to tobacco was a problem in their community.[57]

Expand efforts to increase smoking restrictions on college campuses and aggressively promote cessation services on campuses

College students who live in smoke-free dormitories are less likely to take up smoking than those who live in unrestricted housing, yet few colleges prohibit smoking in dormitories.[12] Also, many colleges *do not* offer cessation programs for students.[13] In New Jersey, despite high rates of smoking among 18 to 24 year olds, few

utilize the state's Quit services. The tobacco industry has increased marketing efforts to college students by sponsoring musical events at bars, advertising in college newspapers, and providing samples.[58] Counter efforts by CTCP partners could include sponsoring alternative events, advertising cessation services in popular college publications, and providing attractive incentives for quitting.

Increase the rate of health care provider referral to Quit services

Physicians and other health care providers are critical to the success of CTCP's new cessation services. Efforts to reach this population should be informed by existing tools such as the Put Prevention into Practice initiative and the US Public Health Service's Clinical Practice Guidelines.[16,59] With limited tobacco control funds and an existing pool of evidence-based clinician materials, the CTCP can adapt these tools and concentrate on diffusing their message to those in a position to refer smokers. Promotional efforts should also target professional organizations for physicians and other health care providers.

Increase television advertising to promote Quit services

With the successful expansion of Quit services in New Jersey, efforts should now focus on increasing awareness and utilization of these services. Utilization data for Quitline and Quitnet suggest that television exposure increased contacts during and immediately following advertising. The CTCP has already developed advertising messages targeted at smokers. As such, funds should be directed toward purchasing media placements rather than creating new campaign messages. It is vital to maintain a relatively consistent level of promotion for cessation services.

Media and outreach efforts should be clear about how smokers can access New Jersey's Quitcenters

Utilization data suggest that CTCP's media efforts to encourage cessation treatment had little impact on Quitcenters. Promotions for the state's Quit services should clearly communicate *all* of the state's available resources: Quitnet, Quitline, and Quitcenters. Also, these services should be closely integrated to facilitate referrals to one another. Furthermore, given that few smokers used medicinal assistance to quit despite concerns about nicotine withdrawal, Quitcenters serve a unique function among the three services in their ability to directly help with withdrawal. Since November 2001, New Jersey Quitcenters have offered reduced-cost nicotine replacement therapy.

Increase utilization of Quit services among specific subgroups

Disparities are not simply defined as variations by age, race, or gender. A disparity is a difference that will have a consequence, particularly in the use of prevention services.[60] Whites, Hispanics, males, and young adults have high smoking prevalence, low quit rates, and are disproportionately *not* using New Jersey's Quit services. Alternatively, black smokers had a higher proportion of quit attempts and quit successes. The CTCP must recognize the high level of tobacco use among these subgroups, most notably white young adults; targeting these subgroups is essential to changing cessation and prevalence rates.

Workplaces should be encouraged to adopt a comprehensive smoking policy that bans smoking indoors as well as at building entrances, in outdoor areas, and in company vehicles

Current law defines a smoke-free workplace as a one with a total ban on indoor smoking or a workplace that permitted smoking indoors only in designated, fully enclosed and separately ventilated areas. There are inherent limitations in this definition as there is no guarantee that designated fully enclosed and separately ventilated smoking locations actually function as such. Furthermore, some evidence suggests that separately ventilated smoking areas may increase the risk of lung cancer among smokers.[61] A total ban on indoor smoking is a more valid and functional definition of a smoke-free workplace and an important area for policymaking. Other priority areas for outreach should include the formalization of a comprehensive workplace tobacco policy and enforcement strategies in writing.

Continue to increase and expand clean indoor air policies at the local level

New Jersey has a strong grassroots movement to enact local indoor air ordinances. Coalition-building, conducting public education campaigns about ETS, and mobilizing public support for these ordinances takes time and adequate funding. In California and Massachusetts, it took approximately two years after the passage of these states' tobacco tax ballot initiatives before significant achievements were made in expanding local clean indoor air ordinances.[62] Based on evidence from successful states, the local level is where the most effective clean indoor air policies have been enacted. Siegel (2002) also suggests that is more effective to concentrate on enacting local clean indoor air ordinances until these policies are so widespread that there is unwavering support for a statewide law that provides 100% protection for indoor areas.[62]

GLOSSARY

Abbreviations and Acronyms

ALF: The American Legacy Foundation is the national, independent public health foundation established by the 1998 Master Settlement Agreement. It is dedicated to reducing tobacco use in the United States through major initiatives reaching youth, women, and priority populations.

BRFSS: Behavioral Risk Factor Surveillance System is an ongoing nationwide surveillance system supported by the CDC and conducted in all 50 states.

CAT: Communities Against Tobacco is a network of local coalitions in each New Jersey county. These coalitions are joined together with a common mission to change or establish community norms, attitudes, and behaviors around tobacco use.

CATI: Computer-Assisted Telephone Interviewing is a system in which a telephone interviewer conducts an interview using a computer and a computerized questionnaire.

CDC: Centers for Disease Control and Prevention is an agency of the US Department of Health and Human Services.

CTCP: Comprehensive Tobacco Control Program, launched in New Jersey in 2000, was created using MSA funds to help stop young people from smoking and help current smokers quit.

DHSS: Department of Health and Senior Services, State of New Jersey.

ETS: Environmental tobacco smoke is a mixture of the smoke given off by the burning end of a cigarette, pipe, or cigar and the smoke exhaled from the lungs of smokers.

LINCS: The Local Information Network Communication System is an electronic public health information system designed to enhance the identification and containment of diseases and hazardous conditions that threaten the public's health.

LSC: The Liberty Science Center, an interactive, hands-on science center, collaborated with DHSS to create a collection of three anti-tobacco programs that combine entertainment and education to reach New Jersey students in grades 4 to 12.

MSA: The Master Settlement Agreement was a landmark legal settlement between 46 states and the tobacco industry intended to compensate the states for health costs attributed to tobacco use.

MTF: Monitoring the Future is an ongoing study of the behaviors, attitudes, and values of American secondary school students, college students, and young adults. The study is conducted at the Institute for Social Research at the University of Michigan.

NJ Quitnet: The New Jersey Quitnet (www.njquitnet.org) is a free online resource for smokers. The website offers peer support groups and trained counselors, 24 hours a day, as well as a quitting calendar, quitting tools and strategies, and a directory of local treatment options.

NJ Quitline: The New Jersey Quitline (1-866-NJSTOPS) is a toll-free telephone based service for smokers that offers one-on-one counseling in 26 languages.

NJ Quitcenters: The New Jersey Quitcenters offer smokers face-to-face counseling in a clinic setting. The 15 Quitcenters offer individual and group therapy as well as reduced-cost nicotine replacement therapy.

NJATS: The New Jersey Adult Tobacco Survey is a population-based survey designed to examine the tobacco behavior, knowledge, and attitudes of New Jersey adults.

NJEDTS: The New Jersey Eating and Drinking Establishment Tobacco Survey collects data on smoking policies in restaurants and bars.

NJGASP: The New Jersey Group Against Smoking Pollution works to secure smoke-free air for nonsmokers and ensure tobacco-free lives for children by helping to create local policy and legislation.

NJSHEP: The New Jersey School Health Education Profiles monitor characteristics of health education in middle schools and high schools.

NJWTS: The New Jersey Workplace Tobacco Survey collects data on workplace tobacco control policies.

NJYTS: The New Jersey Youth Tobacco Survey is a component of CDC's Youth Tobacco Surveillance and Evaluation System and monitors tobacco use behavior among middle and high school students.

N-O-T: Not-On-Tobacco is a quitting program designed specifically for teens developed by the American Lung Association, in collaboration with West Virginia University.

Not for Sale: "Not for Sale" is an advertising campaign intended to support the REBEL movement.

PEP: The Process Evaluation Project was designed to provide useful information and feedback to DHSS about the community-based components of the CTCP. The process evaluation relies on key informant interviews, site visits, and review of secondary data.

REBEL: Reaching Everyone By Exposing Lies is an initiative developed by and for teens in New Jersey to combat tobacco industry marketing tactics.

Synar Amendment: The Synar Amendment, named for the late Congressman Michael Synar, is a federal law that requires states to restrict and reduce youth access to tobacco products or risk loss of block grant funding for alcohol and drug programs.

TASE: Tobacco Age of Sale Enforcement includes merchant education and random unannounced compliance check inspections by DHSS staff or local health officers accompanied by underage youth.

UMDNJ: The University of Medicine & Dentistry of New Jersey is the state's university of the health sciences and includes eight schools on five campuses.

GLOSSARY

DEFINITIONS OF KEY MEASURES

100% tobacco-free school: Defined as a school with a policy that prohibits the use of all tobacco products by everyone (i.e., students, faculty and visitors), in all locations (i.e., indoors, on school grounds, in school vehicles, and at school sponsored events), 24 hours a day.

Current use (adult): Defined as having smoked 100 cigarettes in a lifetime and now smoking cigarettes on some or all days.

Current use (youth): Defined as the use of any tobacco product on one or more of the 30 days preceding the survey.

Established smoker (youth): Defined as having smoked 100 cigarettes in a lifetime.

High school students: Comprised of students who were in the 9th, 10th, 11th, or 12th grade at the time of the survey.

Initiation (cigarettes): Defined as ever having smoked a whole cigarette.

Lifetime use (adult): Defined as having smoked 100 cigarettes in a lifetime.

Lifetime use (youth/young adult): Defined as ever trying a cigarette (or other tobacco product).

Middle School Students: Comprised of students who were in the 7th or 8th grade at the time of the survey.

Quit attempt (adult): Defined as any quit attempt lasting one day or longer (i.e., successes and failures) in the past 12 months as reported by previous year smokers (i.e., current smokers and recent quitters).

Quit attempt (youth): Defined as any quit attempt lasting one day or longer (i.e., successes and failures) in the past 12 months as reported by current smokers.

Quit success (adult): The proportion of previous year smokers (i.e., current smokers and recent quitters) who quit smoking cigarettes within the 12 months prior to the survey.

Quit success (youth): The proportion of established smokers (100+ cigarettes in a lifetime) who reported having quit smoking cigarettes and currently not smoking.

Smoke-free eating & drinking establishment: Defined as an eating and drinking establishment with a total ban on smoking indoors.

Smoke-free workplace: Defined as a workplace with a total ban on indoor smoking or a workplace that permitted smoking indoors but only in designated, fully enclosed and separately ventilated areas.

REFERENCES

1. CDC. Best Practices for Comprehensive Tobacco Control Programs. Atlanta GA: US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 1999 August 1999.

2. NJDHSS. New Jersey Comprehensive Tobacco Control Program 2001 Annual Report. Trenton, NJ: New Jersey Department of Health and Senior Services; 2001.

3. NJDHSS. Healthy New Jersey 2010.

4. Flynn BS, Worden JK, Secker-Walker RH, Badger GJ, Geller BM, Costanza MC. Prevention of cigarette smoking through mass media intervention and school programs. American Journal of Public Health 1992;82(6):827-834.

5. Flynn BS, Worden JK, Secker-Walker RH, Badger GJ, Geller BM. Cigarette smoking prevention effects of mass media and school interventions targeted to gender and age groups. Journal of Health Education 1995;26(2):45-51.

6. Secker-Walker RH, Worden JK, Holland RR, Flynn BS, Detsky AS. A mass media programme to prevent smoking among adolescents: costs and cost effectiveness. Tobacco Control 1997;6(3):207-12.

7. USDHSS. Preventing tobacco use among young people. A report of the Surgeon General. Atlanta, GA: US Department of Health and Human Services; 1994.

8. Delnevo C, Muthurajah S, Brown M, Hrywna M, Malka ES. The 2001 New Jersey Youth Tobacco Survey: A Statewide Report for the New Jersey Department of Health and Senior Services. New Brunswick, NJ: University of Medicine and Dentistry of New Jersey-School of Public Health; April 2002.

9. CDC. Trends in cigarette smoking among high school students—United States, 1991-2001. MMWR - Morbidity & Mortality Weekly Report 2002;51(19):409-12.

10. Johnston L, O'Malley PM, Bachman JG. National Institute on Drug Abuse, University of Michigan. Institute for Social Research. Monitoring the Future national results on adolescent drug use : overview of key findings. Bethesda, MD: National Institute on Drug Abuse U.S. Dept. of Health and Human Services Public Health Service National Institutes of Health; 2001.

11. Sepe E, Glantz SA. Bar and club tobacco promotions in the alternative press: targeting young adults. American Journal of Public Health 2002;92(1):75-8.

12. Wechsler H, Lee JE, Rigotti NA. Cigarette use by college students in smoke-free housing: results of a national study. American Journal of Preventive Medicine 2001;20(3):202-7.

13. Wechsler H, Kelley K, Seibring M, Kuo M, Rigotti NA. College smoking policies and smoking cessation programs: Results of a survey of college health center directors. Journal of American College Health 2001;49(5):205-12.

14. Thorndike AN, Rigotti NA, Stafford RS, Singer DE. National patterns in the treatment of smokers by physicians. JAMA 1998;279(8):604-8.

15. Agency for Healthcare Research and Quality. Put Prevention into Practice. Rockville, MD; June 2002.

16. Fiore MC. US public health service clinical practice guideline: treating tobacco use and dependence. Respiratory Care 2000;45(10):1200-62.

17. National Institutes of Health. Population Based Smoking Cessation: Proceedings of a Conference on What Works to Influence Cessation in the General Population. Smoking and Tobacco Control Monograph No. 12. Bethesda, MD: USDHHS, NIH, NCI; 2000. Report No.: NIH Pub No 00-4892.

18. Raw M, McNeill A, West R. Smoking cessation guidelines for health professionals. A guide to effective smoking cessation interventions for the health care system. Health Education Authority. Thorax 1998;53 Suppl 5 Pt 1:S1-19.

19. Schuster MA, Stein BD, Jaycox L, Collins RL, Marshall GN, Elliott MN, et al. A national survey of stress reactions after the September 11, 2001, terrorist attacks. New England Journal of Medicine 2001;345(20):1507-12.

20. Galea S, Ahern J, Resnick H, Kilpatrick D, Bucuvalas M, Gold J, et al. Psychological sequelae of the September 11 terrorist attacks in New York City. New England Journal of Medicine 2002;346(13):982-7.

21. Vlahov D, Galea S, Resnick H, Ahern J, Boscarino JA, Bucuvalas M, et al. Increased use of cigarettes, alcohol, and marijuana among Manhattan, New York, residents after the September 11th terrorist attacks. American Journal of Epidemiology 2002;155(11):988-96.

22. CDC. Psychological and emotional effects of the September 11 attacks on the World Trade Center — Connecticut, New Jersey, and New York, 2001. MMWR - Morbidity & Mortality Weekly Report 2002;51(35);784-786

23. Nelson DE, Bland S, Powell-Griner E, Klein R, Wells HE, Hogelin G, et al. State trends in health risk factors and receipt of clinical preventive services among US adults during the 1990s. JAMA 2002;287(20):2659-67.

24. AHA. 1996 Tobacco Fact Sheet. North Brunswick, NJ: American Heart Association, New Jersey Affiliate; 1996.

25. Farkas AJ, Gilpin EA, White MM, Pierce JP. Association between household and workplace smoking restrictions and adolescent smoking. JAMA. 2000;284(6):717-22.

26. National Center for Tobacco-Free Kids. Show us the money: A mid-year update on the states' allocation of the tobacco settlement dollars. Washington, DC; July 2002.

27. Grossman M, Chaloupka FJ. Cigarette taxes. The straw to break the camel's back. Public Health Reports 1997;112(4):290-7.

28. Ringel JS, Evans WN. Cigarette taxes and smoking during pregnancy. American Journal of Public Health 2001;91(11):1851-6.

29. Smokeless States National Tobacco Policy Initiative. Tobacco tax challenge: State progress report; 2002.

30. CDC. Investment in Tobacco Control: State Highlights 2002. Atlanta, GA: US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 2002.

31. CDC. Annual smoking-attributable mortality, years of potential life lost, and economic costs—United States, 1995-1999. MMWR - Morbidity & Mortality Weekly Report 2002;51(14):300-3.

32. World Bank. Curbing the epidemic: Governments and the economics of tobacco control. Washington, DC: The World Bank. 1999.

33. McKenzie J, Jurs J. Planning, Implementing, and Evaluating Health Promotion Programs: A Primer. New York, NY: Macmillan Publishing Company; 1993.

34. University of Medicine and Dentistry of New Jersey. Evaluation of the New Jersey Comprehensive Tobacco Control Program: Baseline Measures. New Brunswick, NJ: School of Public Health; April 2001.

35. MacDonald, G Starr G, Schooley M, Yee SL, Klimowski K, Turner K. Introduction to Program Evaluation for Comprehensive Tobacco Control Programs. Atlanta, GA: Centers for Disease Control and Prevention; 2001.

36. RTI. SUDAAN User's Manual, Release 8.0. In. Research Triangle Park, NC: Research Triangle Institute; 2001.

37. Giovino GA. Epidemiology of tobacco use among US adolescents. Nicotine & Tobacco Research 1999(1 Suppl 1):S31-40.

38. NJDHSS. FFY 2002 SAPT Block Grant Application: New Jersey Department of Health and Senior Services; 2001 December.

39. Everett SA, Warren CW, Sharp D, Kann L, Husten CG, Crossett LS. Initiation of cigarette smoking and subsequent smoking behavior among U.S. high school students. Preventive Medicine. 1999;29(5):327-333.

40. National Center for Tobacco-Free Kids. 2002 Fact Sheet on Economic Costs. In. Washington, DC; 2002.

41. Silagy C, Stead LF. Physician advice for smoking cessation. Cochrane Database of Systematic Reviews 2001(2):CD000165.

42. Alfano CM, Zibkowski SM, Robinson LA, Klesges RC, Scarinci IC. Adolescent reports of physician counseling for smoking. Pediatrics 2002;109(3):E47.

43. USDHHS. The Surgeon General's 1990 Report on The Health Benefits of Smoking Cessation. Executive Summary. MMWR - Morbidity & Mortality Weekly Report. Recommendations & Reports 1990;39(RR-12):i-xv.

44. National Institutes of Health. Health Effects of Exposure to Environmental Tobacco Smoke: The Report of the California Environmental Protection Agency. Smoking and Tobacco Control Monograph No. 10. Bethesda, MD: National Cancer Institute - USDHSS; 1999. Report No.: 99-4645.

45. US Environmental Protection Agency. Respiratory Health Effects of Passive Smoking. Washington, DC; 1992.

46. CDC. State-specific prevalence of current cigarette smoking among adults and the proportion of adults who work in a smoke-free environment—United States, 1999. MMWR - Morbidity & Mortality Weekly Report 2000;49(43):978-82.

47. Farrelly MC, Evans WN, Sfekas AE. The impact of workplace smoking bans: results from a national survey. Tobacco Control 1999;8(3):272-7.

48. Moskowitz JM, Lin Z, Hudes ES. The impact of workplace smoking ordinances in California on smoking cessation. American Journal of Public Health 2000;90(5):757-61.

49. Woodruff TJ, Rosbrook B, Pierce J, Glantz SA. Lower levels of cigarette consumption found in smoke-free workplaces in California. Archives of Internal Medicine 1993;153(12):1485-93.

50. Siegel M. Involuntary smoking in the restaurant workplace. A review of employee exposure and health effects. JAMA 1993;270(4):490-3.

51. Evans N, Farkas A, Gilpin E, Berry C, Pierce JP. Influence of tobacco marketing and exposure to smokers on adolescent susceptibility to smoking. Journal of National Cancer Institute 1995;87(20):1538-1545.

52. Gilpin E, Pierce J, Rosbrook B. Are Adolescents Receptive to Current Sales Promotion Practices of the Tobacco Industry? Preventive Medicine 1997;26:14-21.

53. Saffer H, Chaloupka F. Tobacco advertising: economic theory and international evidence. Working paper 6958. In: National Bureau of Economic Research; 1999.

54. US Federal Trade Commission. Cigarette Report for 2000 - Report to Congress for the years 1999 and 2000 pursuant to the comprehensive smokeless tobacco health education act of 1986; 2002.

55. National Center for Tobacco-Free Kids. NJ Tobacco Toll Fact Sheet. Washington, DC; 2002.

56. CDC. Guidelines for school health programs to prevent tobacco use and addiction. Centers for Disease Control and Prevention. MMWR - Morbidity & Mortality Weekly Report 1994;43(RR-2):1-18.

57. Howard KA, Ribisl KM, Howard-Pitney B, Norman GJ, Rohrbach LA. What factors are associated with local enforcement of laws banning illegal tobacco sales to minors? A study of 182 law enforcement agencies in California. Preventive Medicine 2001;33(2 Pt 1):63-70.

58. National Center for Tobacco Free kids. Tobacco marketing to college students since the multistate settlement agreement was signed. Washington, DC; 2001.

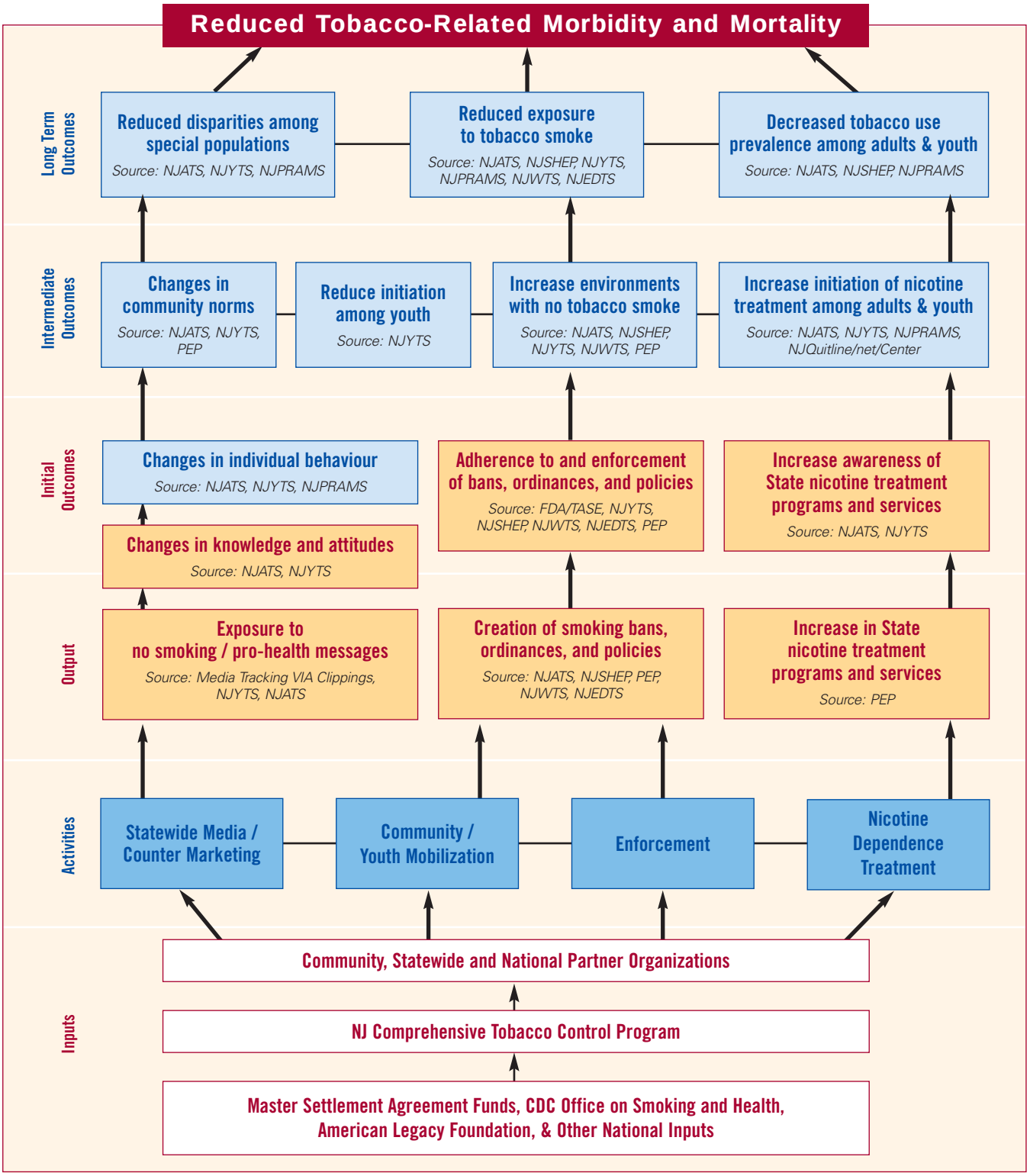
59. USDHHS. Put Prevention into Practice: Clinician's Handbook of Preventive Services, 2nd handbook. Washington, DC: US Government Printing Office; 1998.

60. Rathore SS, Krumholz H. Variations, disparities, and biases: Clarifying racial differences in health care use. Paper in progress.

61. Siegel M, Husten C, Merritt RK, Giovino GA, Eriksen MP. Effects of separately ventilated smoking lounges on the health of smokers: is this an appropriate public health policy? Tobacco Control 1995;4(1):22-29.

62. Seigel M. The effectiveness of state-level tobacco control interventions: A Review of Program Implementation and Behavioral Outcomes. Annual Review of Public Health 2002;23:45-71.

APPENDIX A: NEW JERSEY COMPREHENSIVE TOBACCO CONTROL PROGRAM – LOGIC MODEL WITH EVALUATION DATA SOURCES



APPENDIX B

Table 1: Percentage of New Jersey youth and young adults who ever and currently use cigarettes, by gender and race/ethnicity — New Jersey Youth Tobacco Survey, 2001; New Jersey Adult Tobacco Survey, 2001

	Lifetime Cigarette			Current Cigarette		
	%	(95%CI)		%	(95%CI)	
Middle School						
Gender						
Male	23.6	±	4.2	4.9	±	1.5
Female	22.9	±	3.7	7.0	±	2.8
Race/Ethnicity						
White	18.1	±	3.6	4.5	±	2.1
Black	31.1	±	5.4	6.9	±	1.9
Hispanic	35.6	±	6.5	11.5	±	4.1
Total (middle school)	23.3	±	3.8	6.1	±	2.1
High School						
Gender						
Male	58.9	±	5.2	24.0	±	3.5
Female	60.5	±	3.8	25.0	±	3.1
Race/Ethnicity						
White	60.4	±	5.2	28.3	±	3.9
Black	59.7	±	9.3	12.6	±	3.0
Hispanic	62.8	±	5.7	23.5	±	5.6
Total (high school)	59.6	±	4.2	24.5	±	2.8
Young Adults (18-24 yrs old)						
Gender						
Male	70.1	±	4.9	30.1	±	4.7
Female	60.1	±	4.9	24.3	±	4.3
Race/Ethnicity						
White	74.0	±	3.9	32.3	±	4.2
Black	41.1	±	9.6	16.4	±	7.2
Hispanic	57.8	±	8.8	21.3	±	7.5
Total (young adults)	65.0	±	3.5	27.2	±	3.2

** Youth: Current use of cigarettes for youth defined as use during >1 of the 30 days preceding the survey, while current use of cigarettes for young adults defined as having smoked at least 100 cigarettes in a lifetime and currently smoking everyday or some days.*

Table 2: Percentage of adults who were current smokers, by gender, race/ethnicity, and age group — New Jersey Adults Tobacco Survey, 2000-2001*

	2000	2001
	% (95%CI)	% (95%CI)
Gender		
Male	21.9 ± 2.4	25.8 ± 2.3
Female	18.0 ± 1.7	18.8 ± 1.7
Race/Ethnicity		
White	20.3 ± 1.7	23.6 ± 1.7
Black	19.6 ± 4.4	20.7 ± 4.1
Hispanic	17.3 ± 4.2	17.2 ± 3.8
Age Group		
18-24	27.5 ± 3.5	27.2 ± 3.2
25-45	25.5 ± 2.7	24.2 ± 2.4
46-64	15.9 ± 2.4	22.3 ± 2.8
65+	7.7 ± 2.0	13.5 ± 2.7
Total	19.8 ± 1.5	22.1 ± 1.4

**The 2000 NJATS was reweighted to be compatible with the 2001 NJATS which adjusted for educational distribution.*

Table 3: Tobacco use policies in public schools, grades 6-12, by tobacco product, time and location - New Jersey School Health Education Profiles, 2002

	Student	Faculty	Visitor	All Individuals
	% (95%CI)	% (95%CI)	% (95%CI)	% (95%CI)
Tobacco Product				
Cigarettes	96.4 ± 2.0	90.8 ± 3.1	90.8 ± 3.1	89.6 ± 3.3
Smokeless Tobacco	91.4 ± 3.0	81.5 ± 4.2	78.0 ± 4.4	77.4 ± 4.5
Cigars	94.0 ± 2.5	88.4 ± 3.4	87.5 ± 3.5	86.3 ± 3.7
Pipes	94.0 ± 2.5	88.4 ± 3.4	87.5 ± 3.5	86.3 ± 3.7
24-Hour Policy	83.9 ± 3.9	77.1 ± 4.5	77.7 ± 4.5	76.2 ± 4.6
Location				
In School Buildings	97.0 ± 1.8	95.2 ± 2.3	94.6 ± 2.4	94.3 ± 2.5
On School Grounds	96.4 ± 2.0	93.2 ± 2.7	92.6 ± 2.8	92.0 ± 2.9
In School Vehicles	96.1 ± 2.1	94.3 ± 2.5	91.7 ± 2.9	91.7 ± 2.9
Off-Campus, School Events	89.9 ± 3.2	75.6 ± 4.6	60.4 ± 5.2	59.2 ± 5.3
100% TOBACCO FREE POLICY	n/a	n/a	n/a	42.0 ± 5.3

Table 4: Smoke free policies in worksites, by size of workplace and type of industry, New Jersey Workplace Tobacco Survey, 2001; New Jersey Eating and Drinking Establishment Survey, 2001

	Smoke Free Policy		
	%		(95%CI)
Workplace Size			
05-49 employees	88.6	±	4.0
50-249 employees	86.1	±	4.1
250-499 employees	92.8	±	5.5
>500 employees	93.8	±	3.0
Type of Industry			
Health care and social assistance	100.0	±	0.0
Educational services	99.8	±	0.3
Professional scientific and technical services	99.4	±	0.7
Finance and insurance	97.9	±	4.1
Wholesale trade	95.0	±	6.1
Retail trade	87.9	±	10.1
Real estate and rental and leasing	80.0	±	18.4
Accommodation and food services	77.4	±	15.1
Mining, manufacturing and transportation	76.8	±	10.0
Total [a]	88.4	±	3.5
Eating and drinking establisments [a]			
Fast food/takeout	43.8	±	20.0
Casual/family dining	35.9	±	15.4
Fine dining	37.2	±	28.7
Bar or tavern	0.0	±	0.0
Other	20.0	±	24.0
Total [b]	36.2	±	10.8

[a] *total calculated from the NJWTS and excludes EDTS data*

[b] *data calculated from the NJEDTS*

Prepared by:

Prepared for:

http://www.state.nj.us/health/

For more information please contact the Evaluation Unit at 609-292-4414