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State Synar Report FFY 2006

Youth Access To Tobacco In Louisiana

Executive Summary

Public health importance of youth tobacco use. Tobacco use is the leading preventable cause of chronic illness and premature death in the world, resulting in 4 million deaths in developing countries and 440,000 deaths in the United States each year. It is estimated that tobacco will cause 10 million worldwide deaths/year by 2030, 70% of those deaths in developing nations. The economic consequences of tobacco use are more than 100 billion dollars per year. Every day, 2000 American adolescents begin smoking on a daily basis and it is estimated that 1/3 of these children will eventually die of tobacco related illness. The easy availability of tobacco products, sophisticated marketing methods used by tobacco companies, and relatively minor legal and social consequences of use, combined with nicotine's addictive properties leads to experimentation with tobacco products, and ultimately addiction to tobacco products. Less than 7% of those who try to quit are abstinent 1 year later, highlighting the importance of preventing youth access to tobacco.

Federal Synar Amendment. In 1992, Congress passed the Synar Amendment to the Alcohol, Drug Abuse and Mental Health Administration Reorganization Act. The Synar Amendment, named after its congressional sponsor Mike Synar, requires States to develop laws reducing the sale and distribution of tobacco products to individuals under the age of 18. The law was based upon research evidence that nearly 90% of adult smokers began smoking before the age of 18 and that they regularly purchased their own cigarettes from stores and vending machines. In 1997, state baseline violation rates ranged from 7.2% to 72.7%, with an average rate of 40.6%. Federal actions were taken to move all states to less than 20%. States that fail to comply with the amendment risk losing between 10 and 40% of Federal block grant funds allocated for substance abuse prevention and treatment. It is important to note that Louisiana, which had the highest violation rate in the nation at baseline in 1997, is one of the states with the lowest violation rates in FFY 2005. In the most recently published national data (FFY 2005), Louisiana was ranked 13th, with a non-compliance rate of 7.3%.

Louisiana Synar Initiative. The Louisiana Synar Initiative was created to meet the annual targets for non-compliance established by the Federal Government. The initiative includes the components required of all states (enacting state tobacco statutes, conducting random unannounced inspections, and enforcement); in addition, the Louisiana initiative includes a common theme and statewide logo, state agency mobilization, community mobilization and merchant education, and mass media strategies. The state initiative achieved the target rate of 20% in FFY 1999, 3 years ahead of schedule.

Research Methods. This research provides the most recent evidence of the impact of the Louisiana Synar Initiative on the state non-compliance rate. The study design is a cross-sectional survey of compliance, with compliance is defined as the refusal to sell tobacco to minors. A stratified random sample of outlets are identified and surveyed by a team of one youth operative and two adult agents. The youth operative attempts to purchase tobacco from unrestricted outlets. The adult agents record characteristics of outlets, inspection events, and outcomes, and cite non-compliant outlets and clerks. Information about outlets, inspectors, and the inspection event are entered into an electronic data system via laptop at the time of inspection.

Eligibility and Completion Rates. The Synar inspections for the annual survey were conducted from 13 July 2005 to 12 August 2005. At the point of inspection, the outlet name and address was verified. Ineligible outlets and non-completed outlets were identified. Eligible outlets were inspected. 17.4% of outlets in the original sample were ineligible for inspection, primarily adult clubs and outlets that were permanently out of business. 0.5% of eligible outlets were not inspected, primarily because the outlet was a drive thru only and the youth inspector did not have a drivers license.

Characteristics of outlets. The predominant types of outlets were convenience stores (63.3%). 16.9% of the outlets were small grocery stores or supermarkets. Most of the time, tobacco is sold over-the counter, assisted by a salesclerk (97.9%). Most of the time, federally-mandated warning signs were posted (99.9%). Only 19 of the outlets had vending machines (2.1%).

Characteristics of the inspection event. Most of the time, the purchase attempt was over the counter, assisted by salesclerk (97.9%). Only 2.1% of all attempts involved vending machines, reflecting the low rate of vending machines currently in tobacco outlets. Most of the purchase attempts involved white or African American female salesclerks older than 30. 70.1% of all purchase attempts involved female salesclerks, 65.1% of the purchase attempts involved salesclerks older than 30, and 49.1% of the purchase attempts involved white salesclerks. Most of the time, salesclerk requested photo identification to verify the youth's age (88.6%).

Statewide Non-Compliance Rate. The current weighted violation rate for Louisiana is 6.7% with a 95% probability that the rate is between 0 and 8.0%. Of the 61 non-compliant outlets, 85.2% of the violations involved the successful buy of cigarettes; 13.1% involved the successful buy of a single cigar. All non-compliant outlets were given a citation for Administrative Violation 26:911a1, Louisiana ATC Title 26 Administrative Law, Sales of Tobacco to Underage, and all sellers were given a citation for Criminal Offense 14:91.8, Louisiana Title 14 Criminal Law, Sales of Tobacco to Underage.

Conclusions. The methods for selecting the Synar sample, the quality of the sampling frame, the structured inspection procedures, enhanced method of collecting data via laptop computers, strengthened training sessions for agents, and use of multivariate analyses to identify a set of risks for non-compliance that persist in the presence of other risks minimize bias in Louisiana's Synar Research. Therefore, strong confidence may be placed in the sharply declining non-compliance rate, and the identified risks of non-compliance.

Policy Recommendations. The State of Louisiana, through the Office for Addictive Disorders and Alcohol Tobacco Control, has been extremely successful in reducing the illegal sales of tobacco products to minors. This dramatic, sustained decrease in non-compliance is one of the sharpest declines in the country, and reflects a highly effective education and enforcement program. Continued leadership in the nationwide effort will be contingent upon both maintenance of current efforts and the initiation of innovative approaches towards high-risk groups. The Office of Alcohol and Tobacco Control has a limited number of agents to conduct compliance checks. The large rural populations make it logistically difficult for agents to conduct compliance checks in a timely manner. OATC is legally responsible for enforcing the tobacco and alcohol laws, but receives limited resources from the state to enforce these laws. Therefore it is critical to use the state's scarce economic resources wisely.

The results concerning high-risk regions potentially identify targets for upcoming enforcement and education activities. As the Synar rate gets lower, enhancing the universal statewide efforts with more intensive targeted efforts at high-risk areas is imperative for continued improvement in preventing youth access to tobacco. Targeting activities is not only a significant way of further lowering the non-compliance rate, but feasible, given that the Office for Addictive Disorders and the Office of Alcohol and Tobacco Control have developed a true partnership, and the 10 Regional Synar Programs have broad and deep capacity to ensure the maintenance of a comprehensive statewide Synar program. Four regions have non-compliance rates higher than the state average rates. Targeting merchant education and enforcement resources to those four regions should continue to decrease to statewide non-compliance rate.

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Frederick P. Cerise, MD, MPH ¹



At the Louisiana Office of Alcohol and Tobacco Control Headquarters, thanks to Commissioner Murphy J. Painter, M.P.A., Enforcement Chief Steve Spalitta, Staff Officers Louis Thompson and Larry Hingle, and Training Supervisor Ronald Kinchen for their guidance and their unwavering support of enforcement activities. Office of Alcohol and Tobacco Control agents accompanied youth operatives on compliance checks, and documented the check, under the direction of Regional Enforcement Supervisors:

Murphy J. Painter, MPA ²

Regional Enforcement Supervisors

Charles Gilmore	Region 1
Jerry Jones	Region 2
Tyrone Banks	Region 3
Stacey Roberts	Region 4
Tom Taylor	Region 5



ATC Enforcement Regions ²

Very special thanks to the youth operatives, who tested compliance in teams with adult agents, but must remain nameless to protect their confidentiality.

Finally, thanks to Sabine Eustache for programming and analysis.

Lisa Ulmer

¹ Louisiana Department of Health and Hospitals

² Louisiana Department of Revenue, Alcohol and Tobacco Commission

I. BACKGROUND

Youth Tobacco Use

Public health importance of youth tobacco use

Smoking is the most preventable cause of chronic illness and premature death in the world, resulting in 4 million deaths in developing countries and 440,000 deaths in the United States each year (McGinnis & Foege, 1993; World Health Organization, 1999). It is estimated that tobacco will cause 10 million worldwide deaths/year by 2030, 70% of those deaths in developing nations (World Health Organization, 1999). The economic consequences of tobacco use are more than 100 billion dollars per year. Cigarette smoking is also an important contributor to health inequalities, being more common among the disadvantaged worldwide and in our country (US Department of Health and Human Services, 1998; National Household Survey on Drug Abuse, 2001; World Health Organization, 1999).

Currently, 28.2% of Americans under the age of 18 smoke cigarettes (National Household Survey on Drug Abuse, 2001). In national surveys, 15.1% have used tobacco products in the 30 days preceding the survey, with cigarettes the most common tobacco product used.

Concurrent with tobacco use, adolescents are substantially more likely to have physiological symptoms of lower levels of lung function, reduced endurance, faster resting heart rates, and shortness of breath, compared to non-users. They are also more likely to see health professionals for psychological complaints, and more likely to engage in a constellation of risky behaviors including fighting, unprotected sex, and alcohol and other drug use (Arday, Giovino, Schulman, Nelson, Mowery, and Samet, 1995; US Department of Health and Human Services, 1994).

Many adolescent smokers continue smoking into adulthood (US Department of Health and Human Services, 1994). Every day, 2000 American adolescents begin smoking on a daily basis and it is estimated that 1/3 of these children will eventually die of tobacco related illness (Morbidity and Mortality Weekly Report, 1996; National Household Survey on Drug Abuse, 2001). The median cessation age for young smokers is estimated to be 33 years for males and 37 years for females. Therefore, 50% of adolescent males may smoke for at least 16 years, and 50% of adolescent females may smoke for at least 20 years, based on a median age of initiation of 16 years (Pierce & Gilpin, 1996).

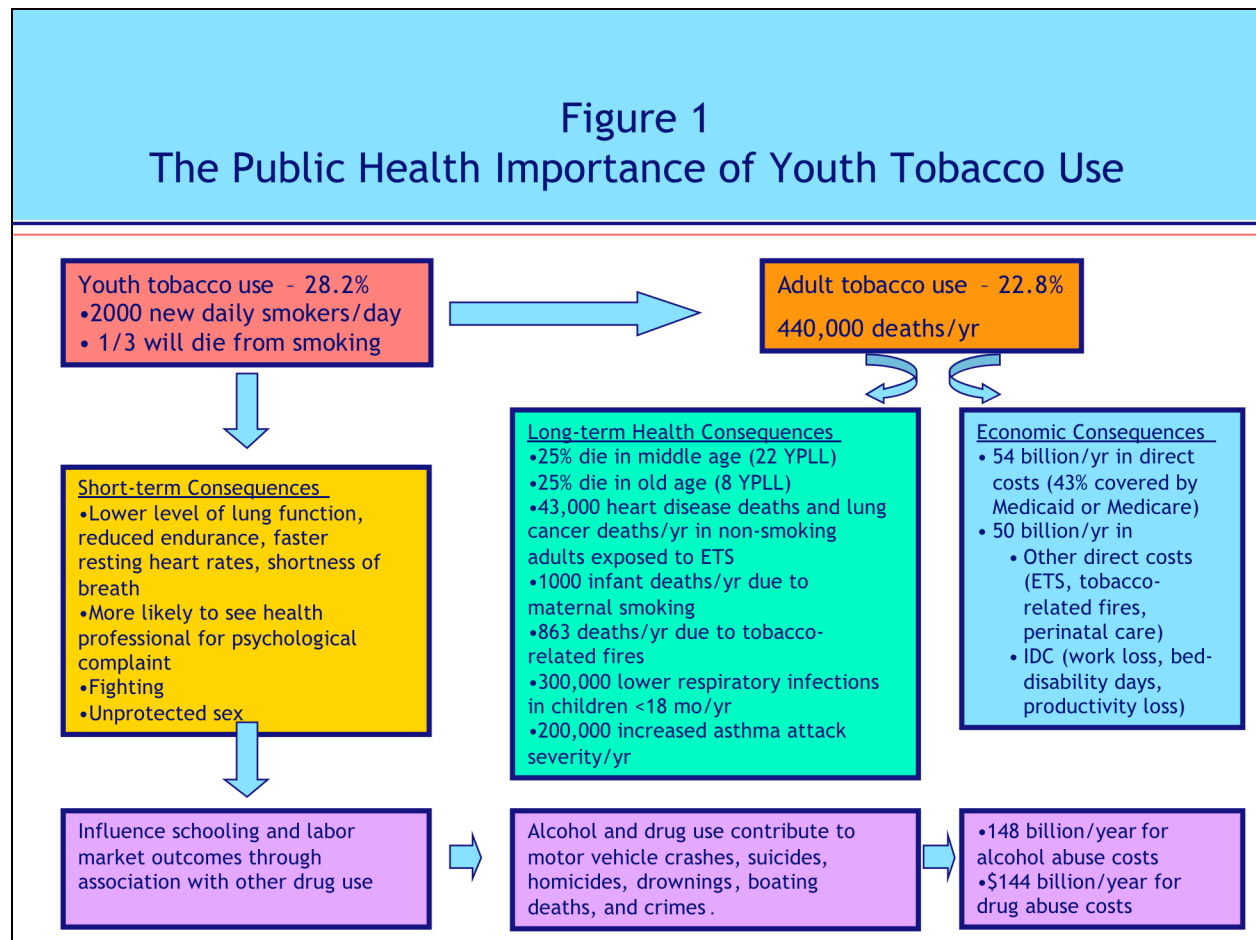
Currently, 22.8% of adult Americans smoke, and half of adult smokers will die prematurely of tobacco-related illness. Tobacco use is responsible for more than the combined deaths from AIDS, car accidents, alcohol, homicides, illegal drugs, suicides and fires (Lynch and Bonnie, 1994). Of the 440,000 deaths/yr due to tobacco-related illness, 25% are smokers who die in middle age (22 YPLL), 25% are smokers who die in old age (8 YPLL), 43,000 deaths are due to heart disease and lung cancer in non-smoking adults exposed to environmental tobacco smoke, 1000 deaths are infant deaths due to maternal smoking, and 863 deaths are due to tobacco-related fires (Peto, Lopez, Boreham, Thun, & Heath, 1994; Steenland, 1992; US Environmental Protection Agency, 1992). In addition to the tremendous burden of tobacco-related mortality, there is also heightened morbidity including 300,000 lower respiratory infections in children <18 months each year and 200,000 asthma attacks of increased severity each year.

Current tobacco smokers are more likely to use alcohol and other drugs. Smokers have almost 5 times higher heavy alcohol use compared to non-smokers (14.0% vs. 3.0%) and 3 times higher binge drinking rates (40.2 % vs. 14.0%). Smokers also have 6 times higher rates of illicit drug use compared to non-smokers (18.2% vs. 3.3%). Tobacco has additional social impacts through its association with alcohol and other drug use. Alcohol and drug use contribute to motor vehicle crashes, suicides, homicides,

drownings, boating deaths, and crimes. (Grossman, Chaloupka, Saffer, & Laixuthai, 1994; Inciardi & Pottieger, 1991; Perrine, Peck, & Fell, 1988)

The direct economic costs of tobacco use are estimated at \$54 billion per year, with 43% covered by Medicaid or Medicare (Bartlett, Miller, Rice, & Wax, 1994; Miller, Ernst, & Collin, 1999). An additional \$50 billion per year includes other direct costs from exposure to environmental tobacco smoke, tobacco-related fires, and perinatal care of infants whose mothers smoke, and indirect costs from work loss, bed-disability days, and productivity loss.

Current analyses of the costs generated by substance use problems in the U.S. population estimate that the U.S. economy absorbed \$148 billion per year in alcohol costs and \$144 billion per year in substance abuse costs. Most of the costs of substance abuse are due to crime, including the costs associated with police protection, private legal defense, property destruction, and productivity losses for those who engage in drug-related crime or for people incarcerated in prison as a result of a drug-related crime (Harwood, 1998). Additionally, researchers have linked substance use during high school and young adulthood to lower educational attainment and lower earnings. Alcohol is implicated in more than 40 percent of all college academic problems and 28 percent of all college dropouts. At both 2- and 4-year colleges, the heaviest drinkers make the lowest grades. High school students who use alcohol or other substances are five times more likely than other students to drop out of school or to believe that earning good grades is not important (Cook & Moore, 1993; Kenkel & Ribar, 1994; Yamada, Kendix, & Yamada, 1996). Figure 1 illustrates the public health importance of youth tobacco use.

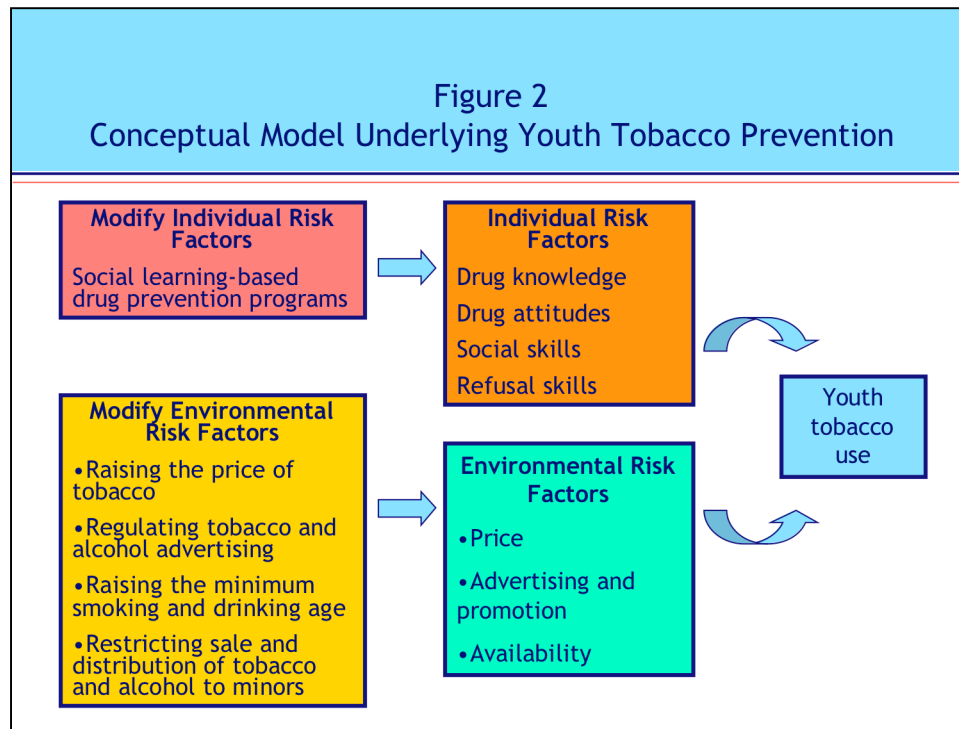


Conceptual model underlying prevention of youth tobacco use

The addictive nature of nicotine underlies the intractability of smoking behavior (Stolerman and Jarvis, 1995; US Department of Health and Human Services, 1988). Nicotine has been shown to have effects on brain dopamine systems similar to drugs such as heroin and cocaine (Pick, Pagliusi, & Tessari, 1997). Over 80% of adult smokers began smoking before age 18, and 35% were daily smokers by age 18 (United States Department of Health and Human Services, 1994). 70% of current smokers are not ready to quit, and of the 30% who attempt to quit, only 0.5% are successful, highlighting the importance of prevention of youth tobacco use. Rates of dependence vary by age. Adolescents are particularly vulnerable to becoming nicotine dependent, especially at low levels of cigarette consumption, and when they continue to smoke on a regular daily basis, suggesting the importance of preventing initiation of smoking as well as shortening smoking careers (Kandel and Chen, 2000).

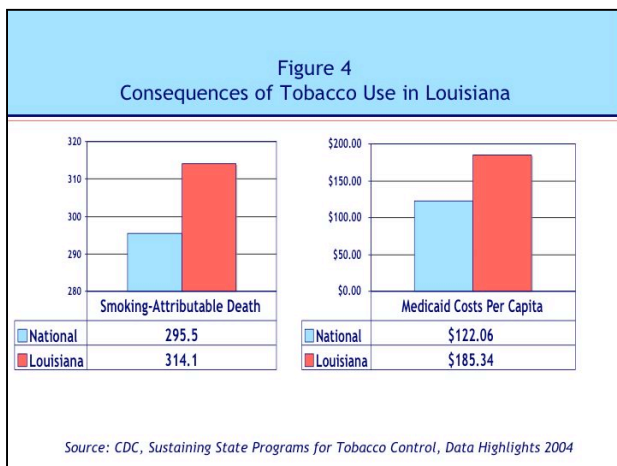
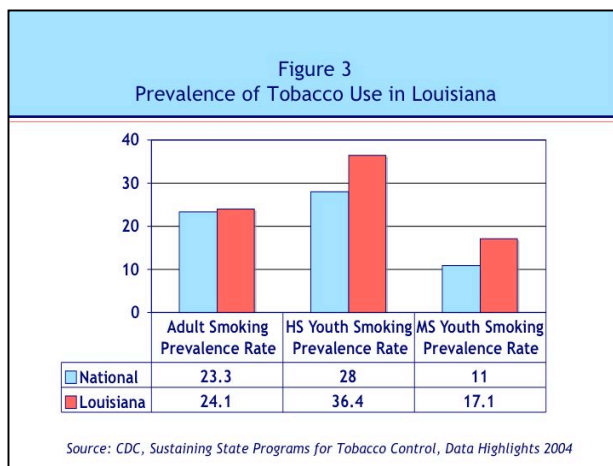
The addictive nature of nicotine combines with the easy availability of tobacco products, minimal social and legal consequences, and advertising and promotion strategies to increase the likelihood of tobacco use. Over the past 3 decades, a wide range of prevention strategies have been directed at reducing the demand for tobacco products by modifying individual characteristics (increasing drug knowledge, changing attitudes about drugs, increasing social skills, and resisting social influence or peer pressure) and the environmental context of individuals (changing school, workplace, and community policies¹). Research indicates that social learning-based drug prevention programs directed at individual risks for tobacco use have positive long-term effects on tobacco, alcohol, and marijuana use (Botvin, Griffin, Diaz, Scheier, Williams, Epstein, 2000; Dusenbury & Falco, 1995; Eggert, Thompson, Herting, Nicholas, & Dicker, 1994; O'Donnell, Hawkins, Catalano, Abbott, & Day, 1995; Pentz, 1999). Similarly, price increases, restrictions on tobacco advertising and promotion, restrictions on smoking in public places directed at environmental risks for tobacco use, lead to significant reductions in cigarette smoking (Bickel & Madden, 1998; Chaloupka & Grossman, 1996; Chaloupka & Warner; King, Siegel, Celebucki & Connolly, 1998; Pierce, Choi, Gilpin, Farkas, & Berry 1998; Pierce & Gilpin, 1995). Less is known about the effect of reducing youth access to tobacco on subsequent tobacco use (Cummings et al, 1998; Forster et al, 1998; Forster & Wolfson, 1998; and Gemson et al, 1998); however, recent federal legislation requiring states to reduce the sale of tobacco products to minors (Synar amendment) and Food and Drug Administration regulations establishing 18 as the national minimum age of tobacco sale and requiring vendors to verify purchaser age have stimulated the investigation of supply-side prevention strategies. Figure 2 illustrates the conceptual model underlying youth tobacco prevention strategies.

¹ School, workplace, and community policies include laws or policies creating drug-free environments, restricting the sale and distribution of tobacco and alcohol to minors, raising the minimum drinking age, regulating tobacco and alcohol advertising, and raising the price of tobacco and alcohol.



Tobacco Use in Louisiana

Although the adult smoking rate in Louisiana is similar to the national adult smoking rate (24.1 % vs. 23.3%), youth smoking rates, smoking-attributable death rates, and Medicaid costs per capita are higher in Louisiana than the nation. Smoking rates are higher for Louisiana high school students compared to high school students nationally (36.4% vs. 28.0%) and smoking rates are higher for Louisiana middle school students compared to middle school students nationally (17.1% vs. 11.0%). The smoking attributable death rate, which includes smoking related disease for adults 35 years of age and older, smoking related disease for infants, and deaths from cigarette related fires, is higher in Louisiana than the nation (314.1 vs. 295.5), and Medicaid costs attributable to smoking are higher in Louisiana than nationwide (\$185.34 vs. \$122.06). Figures 3 & 4 compare the extent and magnitude of tobacco use in Louisiana to the nation.



Federal Synar Legislation

History and Major Requirements of Synar Amendment

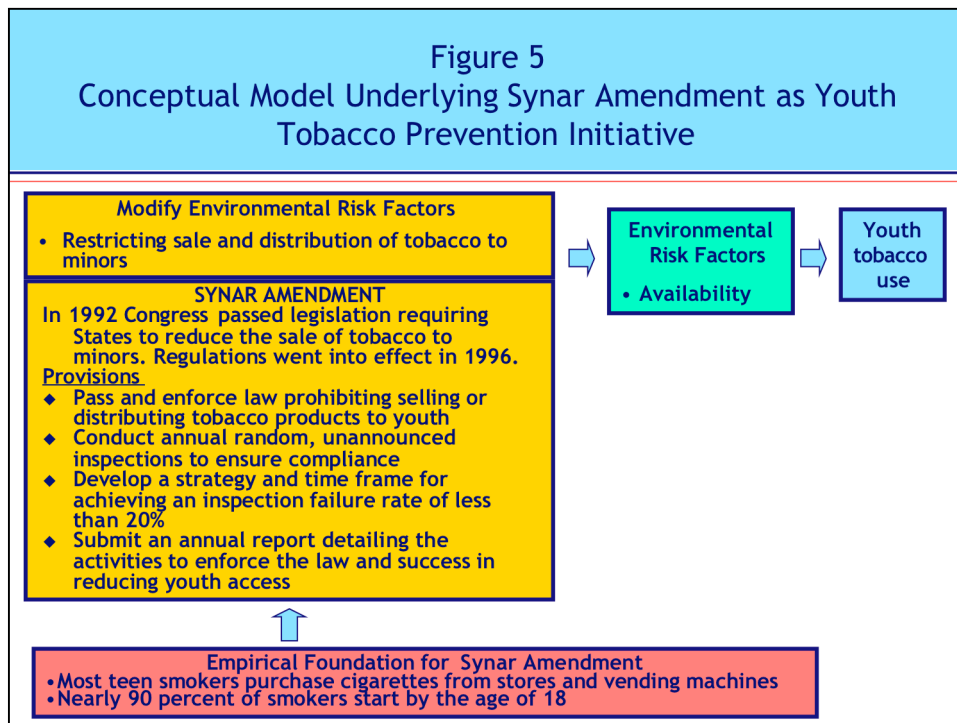
In 1992, Congress passed Section 1926 of Title XIX of the Federal Public Health Service Act, commonly called the Synar Amendment, after its congressional sponsor Mike Synar. The Synar Amendment requires States to develop laws reducing the sale and distribution of tobacco products to individuals under the age of 18, and was based upon research evidence that nearly 90% of adult smokers began smoking before the age of 18 and that they regularly purchased their own cigarettes from stores and vending machines. On January 19, 1996, the U.S. Department of Health and Human Services issued the final implementation regulations for the Synar Amendment. Compliance with the Synar Amendment is a condition of funding for states receiving the Substance Abuse Prevention and Treatment (SAPT) block grant. 40 percent of the block grant funding can be withheld for not complying with the Synar Amendment. The main requirements of the law include:

- **Enforcement:** States pass and enforce law prohibiting selling or distributing tobacco products to any individual under the age of 18 (19 in Utah);
- **Monitoring Compliance:** Conduct annual random, unannounced inspections to ensure compliance;
- **Strategic Plan:** Develop a strategy and a time frame for achieving an inspection failure rate of less than 20
- **Communicating Results:** Submit an annual report detailing the activities to enforce their law and overall success in reducing youth access.

The regulations are based on the assumption that enforcement of the minors' access law will lead to a decrease in the number of outlets making illegal sales to minors, thus lowering youth access to tobacco, and ultimately reducing youth tobacco use. Synar activities include:

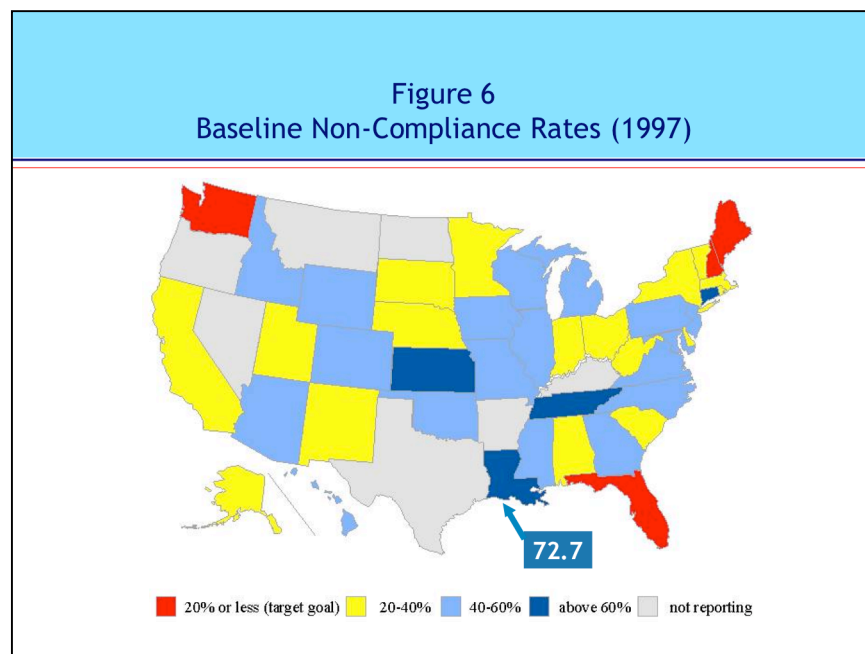
1. Conducting frequent unannounced retailer compliance checks to identify retailers who sell tobacco to minors
2. Imposing a graduated series of civil penalties on the retailer, including license revocation
3. Eliminating tobacco vending machines and self-service displays in stores accessible to young people
4. Providing comprehensive merchant education to deter retailer violation
5. Sending minors into stores to attempt to purchase cigarettes

Figure 5 illustrates the conceptual model underlying the Synar Amendment as a youth tobacco prevention initiative.

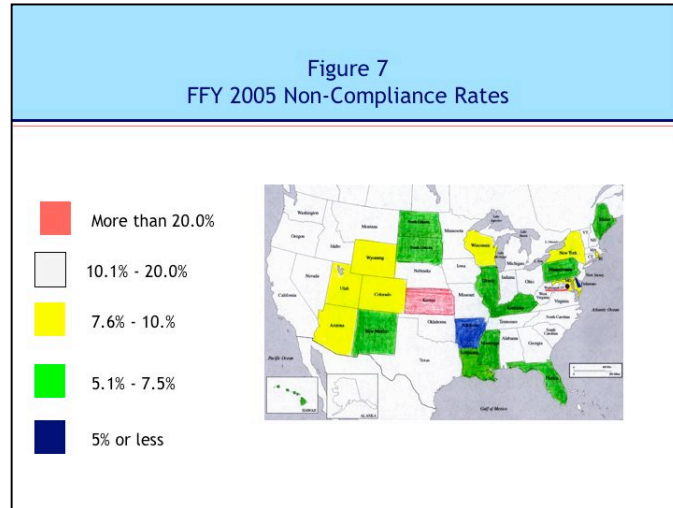


National Violation Rates

In 1997, the baseline violation rate ranged from 7.2% to 72.7%, with an average rate of 40.6%. Figure 6 shows the 1997 Baseline violation rates (i.e., % of illegal tobacco sales to minors) for all states. It is important to note that Louisiana had the highest violation rate in the nation (72.7%).



Federal actions were taken to move all states to less than 20%. States that failed to comply with the amendment risk losing between 10 and 40% of Federal block grant funds allocated for substance abuse prevention and treatment. Overall, the national non-compliance rate dropped to 12.0% in 2005, down from 12.8% reported in 2004 and 40.1 percent since the annual surveys began in 1996. Figure 7 and Table 1 show the state results for 2005. 49 states achieved the legislative goal of non-compliance rates at 20% or less, with 13 states at 7.5% or less, including Louisiana.



Rank	State	Rate	Rank	State	Rate
1	Delaware	.9	27	Indiana	11.9
2	Arkansas	4.2	28	Alaska	12.1
3	Hawaii	5.3	29	Idaho	12.3
4	Maine	5.3	30	New Jersey	12.6
5	Kentucky	5.6	31	Vermont	12.7
6	Mississippi	6.0	32	Virginia	13.1
7	Illinois	6.4	33	New Hampshire	13.4
8	New Mexico	6.4	34	West Virginia	13.4
9	North Dakota	6.9	35	Minnesota	13.7
10	Florida	7.0	36	Alabama	13.9
11	Pennsylvania	7.0	37	Oklahoma	13.9
12	South Dakota	7.1	38	California	14.0
13	Louisiana	7.3	39	Ohio	14.3
14	Maryland	8.0	40	Montana	14.5
15	Utah	8.0	41	Oregon	14.6
16	Arizona	8.3	42	Massachusetts	15.2
17	Wisconsin	8.3	43	Nevada	15.3
18	Wyoming	8.7	44	Nebraska	15.5
19	Colorado	9.0	45	Texas	15.5
20	New York	9.5	46	Georgia	16.5
21	Rhode Island	9.5	47	North Carolina	16.8
22	Tennessee	10.9	48	Connecticut	18.0
23	Iowa	11.4	49	Michigan	19.4
24	Missouri	11.5	50	District of Columbia	20.5
25	South Carolina	11.5	51	Kansas	38.0
26	Washington	11.7			

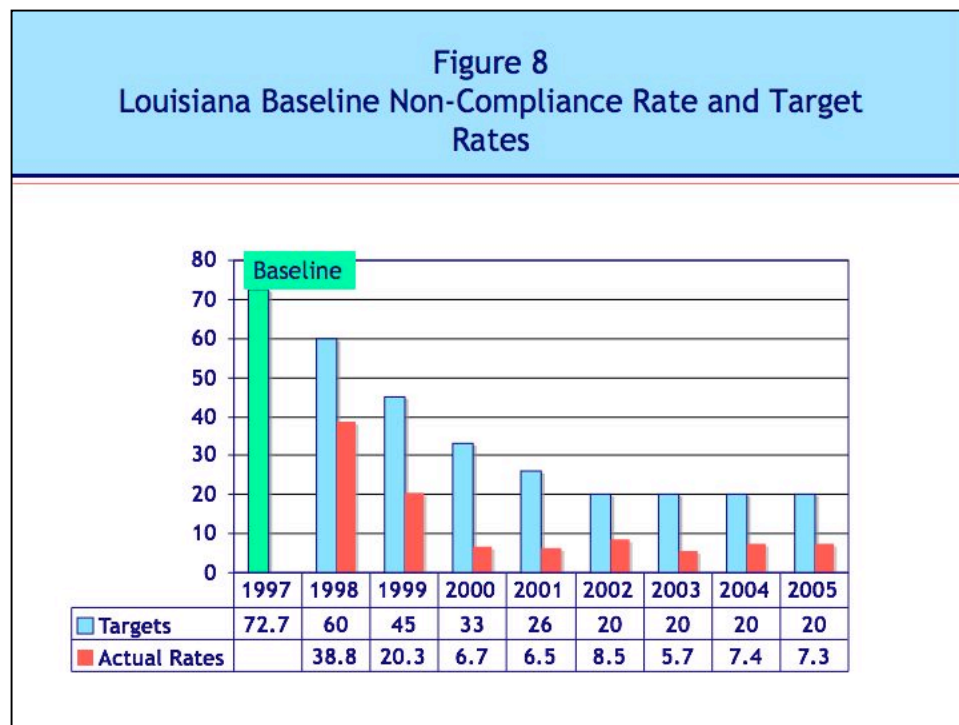
Louisiana Synar Initiative

Lead Synar Agency and Enforcement Agency

The Synar Amendment to the Public Health Service Act (PL 102-321) requires the State of Louisiana to conduct random, unannounced inspections of tobacco outlets to measure the unlawful distribution of tobacco products to individuals under age 18. The Office for Addictive Disorders (OAD) in Louisiana's Department of Health and Hospitals (DHH), is the single state agency charged with tobacco policy implementation under federal law. The Louisiana Office of Alcohol and Tobacco Control is the regulatory agency for both alcohol and tobacco as stipulated in Louisiana State Law. The Louisiana Department of Revenue's Office of Alcohol and Tobacco Control (OATC) is the agency responsible for implementation of the Synar inspections. The random sample of tobacco outlets to be visited during the Annual Synar Study is provided to OATC by OAD. The Office of Alcohol and Tobacco Control conducts the random, unannounced inspections of the tobacco outlets and is responsible for enforcing the tobacco access laws.

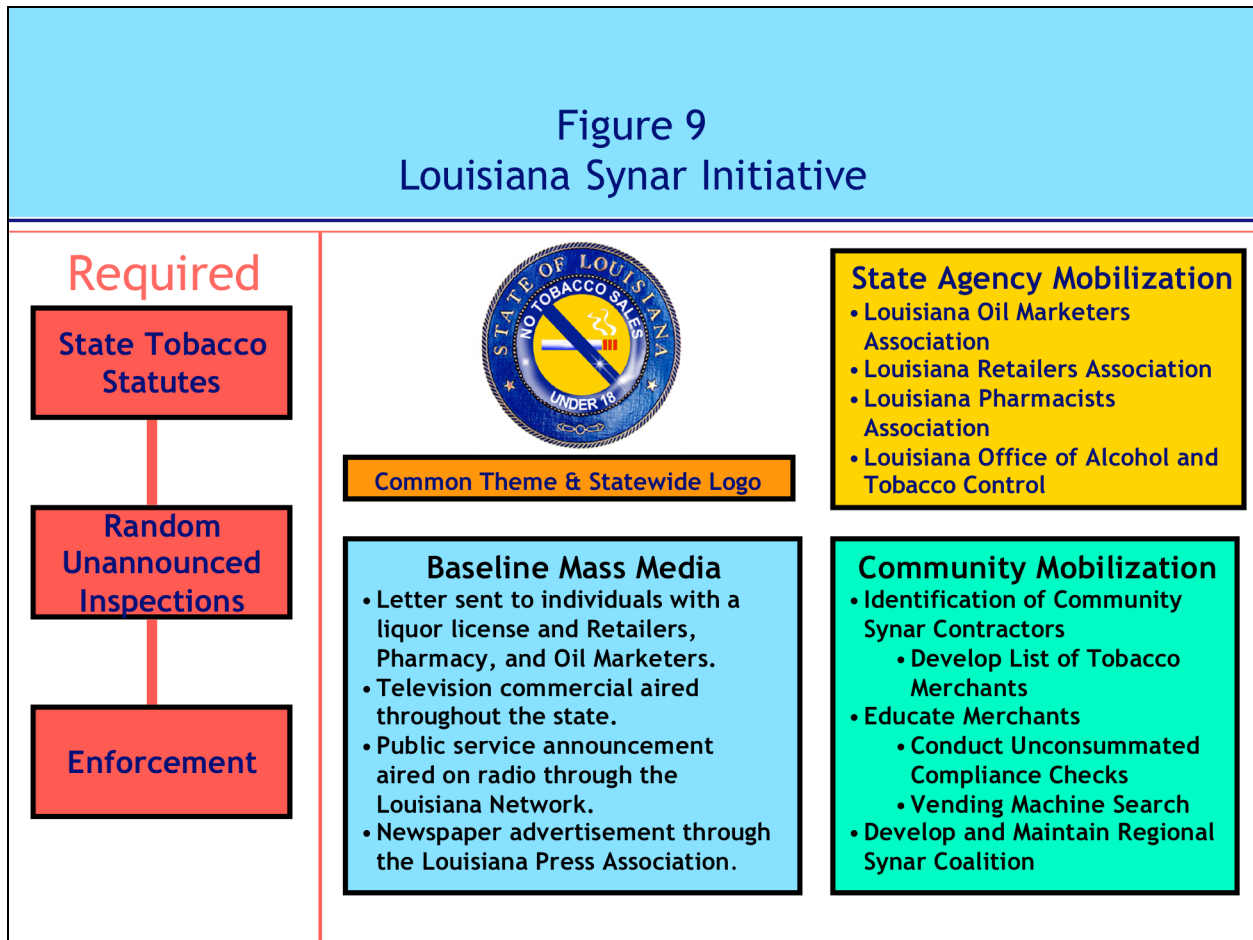
Louisiana Baseline, Target Rates, and Actual Rates

In December 1996, the first baseline was conducted on tobacco sales to persons under the age of 18. 72.7% of Louisiana merchants were non-compliant with the law. As a result of the baseline, target non-compliance rates were set by CSAP for the state by Federal Fiscal Year. The Louisiana Synar Initiative was created to meet the annual targets for non-compliance established by the Federal Government. The state initiative achieved the target rate of 20% in FFY 1999, 3 years ahead of schedule, and the FFY 2005 survey revealed that Louisiana had a non-compliance rate of 7.3%. Louisiana's baseline rate, target rates, and actual rates are shown in Figure 8.



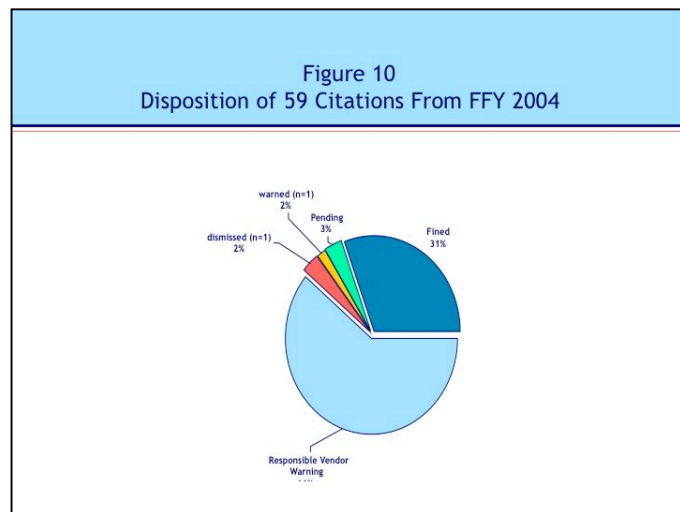
Major Components of the Initiative

The Louisiana Synar Initiative was created to meet the annual targets for non-compliance established by the Federal Government. The initiative includes the components required of all states (enacting state tobacco statutes, conducting random unannounced inspections, and enforcement); in addition, the Louisiana initiative includes a common theme and statewide logo, state agency mobilization, community mobilization and merchant education, and mass media strategies. Figure 9 illustrates the components of the Louisiana Synar Initiative.



Synar Inspections and Enforcement. Louisiana combines Synar inspections with enforcement. The State of Louisiana has both a criminal law addressing underage sales and possession as well as an administrative law that covers licensed establishments and their workers. If the violation generates from a sale at a licensed establishment, generally both the clerk and the business are cited. The business is generally issued an administrative violation and the clerk is cited criminally. However, in cases where a licensed establishment is not involved only criminal citations are issued. Criminal citations are turned over to the District Attorney within the Parish (county) where they are written and adjudicated within the court system of that Parish. The clerk of court for the respective district keeps the records of the court decision regarding these cases. Administrative violations are handled by the Louisiana Office of Alcohol and Tobacco Control administrative prosecutors' office and are heard by the Commissioner of OATC or the Staff Attorney. Records of all administrative cases are kept by case file at OATC. Merchants found to be in compliance are issued a certificate/letter of appreciation from the Commissioner of OATC.

- **FFY 2005 Citations by OATC.** A total of 508 citations were issued by OATC from July 1, 2004 to June 30, 2005. These were a result of 254 tobacco sales. As stated above, each time a merchant is found to be in violation of the law, a citation is issued to the store owner and the clerk who made the sale.
- **FFY 2005 DHH Compliance Checks.** The Office for Addictive Disorders contracted with the Office of Alcohol and Tobacco Control to conduct a total of 2,400 unannounced compliance checks from July 1, 2004 to June 30, 2005. 1,140 of these random, unannounced tobacco inspections were conducted for the annual Synar Report with 59 merchants found to be in violation of the law. The additional 1,260 compliance checks were conducted throughout the year for enforcement purposes with 61 merchants found to be in violation. Merchants found to be in violation of the law were issued citations. Merchants found to be in compliance are issued a certificate/letter of appreciation from the Commissioner of OATC.
- **FFY 2005 Dispositions of Violations from Annual Synar Survey.** OATC also tracked the disposition of violations that occurred during the FFY 2005 Annual Synar Report. During the 2005 Annual Synar Report, 59 merchants were found to be in violation. The 18 fines assessed are those specific to store owners with the following amounts paid: 10 at \$50.00, 6 at \$150.00, 1 at \$200.00 and 1 at \$225.00. The remaining dispositions were as follows: 2 were issued warnings, 36 were issued Responsible Vendor Warnings, 1 was suspended for an unpaid fine and 2 are pending. Dispositions of the 48 citations from FFY 2004 are shown in Figure 10.



- **FFY 2006 Annual Synar Survey Enforcement Activities.** During the Synar inspections for this annual report (FFY 2006), 1103 outlets were surveyed. Of the 1103 surveyed, there were 192 ineligible outlets (17.4%) and 911 eligible outlets (82.6%). 905 of the eligible outlets (99.3%) were tested for compliance of which 61 merchants were found to be non-compliant with the law (7.3%). These 61 merchants were issued a citation.

Community mobilization to increase support for retailer compliance with youth access laws.

Regional Synar coalitions were established in each of the 10 regions in the state during the FFY 1997 and a coalition in each of the parishes within a given region was established during FFY 1998. Members of the coalitions include representatives from regional OAD prevention coordinators, local district attorney's office, mayor's office, Department of Education, local law enforcement, local media, and local parent Organizations. During FFY 2005, all ten (10) OAD regions had a Regional Synar Contractor. Each of these contractors hosted a Regional and Parish Coalition meeting once per quarter. During these coalition meetings, members received training and information about educating merchants and conducting unconsummated compliance checks.

Merchant Education and/or Training. A Synar Contractor was funded in each of the 10 OAD administrative regions in the state. An important role of the Synar Contractor has been to train and supervise youth volunteers to conduct unconsummated compliance checks. A total of 3,517 unconsummated compliance checks were conducted from July 1, 2004 to June 30, 2005 to include the following: 350 in Region 1; 353 in Region 2; 345 in Region 3; 350 in Region 4; 460 in Region 5; 263 in Region 6; 336 in Region 7; 281 in Region 8; 378 in Region 9; and 401 in Region 10. During unconsummated compliance checks, these merchants were provided *Thank You* and *No Thank You* cards, educational cards, and certificates as appropriate. Each merchant where an unconsummated compliance checks was conducted was also provided an educational packet including written materials, window decals, and stickers regarding the current laws and goals of the Synar Amendment. In addition to the 3,517 merchants educated during the unconsummated compliance checks, 112 more merchants received educational packets for a statewide total of 3,629 merchants receiving educational materials.

Incentives for merchants who are in compliance. During unconsummated compliance checks conducted by community coalitions, merchants were provided *Thank You* and *No Thank You* cards, educational cards, and certificates as rewards or reminders. During routine, consummated compliance checks conducted by agents of the Office of Alcohol and Tobacco Control, merchants who are found in violation are issued administrative and criminal citations. Those are found to be compliant with the law receive a letter of appreciation by mail signed by the Commissioner of the Office of Alcohol and Tobacco Control.

Community education regarding youth access laws. The Office for Addictive Disorders is the single state authority for the treatment and prevention of substance abuse (NASADAD) as well as being the agency responsible for Synar implementation. OAD used SAPT Block Grant funds to contract with primary prevention providers. These contractors provided services in the programmatic areas of Information Dissemination, Education, Alternative Activities, Problem Identification and Referral, Community-based Process and Environmental. All contractors were required to address the prevention of alcohol, tobacco, and other drugs (ATOD). During the period of July 1, 2004 - July 31, 2005, all ten (10) Regions of the State provided the Regional Teen Institute Leadership camp to over 600 youth and adult leaders. The purpose of RTI is to provide teams of youth and adults with the knowledge and skills to return to their community and implement programs in the area of alcohol, tobacco and other drug prevention. As a part tobacco education, RTI participants were provided with information specific to the Synar Amendment and Louisiana's Synar Program. OAD awarded mini-grants to RTI groups to support year round youth activities related to ATOD. Several of these mini-grants were specific to tobacco prevention.

Media use to publicize compliance inspection results. The Office for Addictive Disorders announced the results of the annual Synar Report through a Press Release. The Press Release was issued on Monday, August 15, 2005. The Press Release revealed that the State's non-compliance rate was 7.3%, not much different than the rate of 7.4% reported in FFY 2004. In addition to the Press Release outlining the results, the following link was provided to access a full copy of the FFY 2005 Synar Report: <http://www.dhh.state.la.us/offices/publications/pubs-23/Full%20Report.pdf>

Research Questions and Approach

The major national Synar research gaps include the need to improve sampling methods, the need to improve data collection methods, and the need to examine legislative impact. Louisiana Synar research is contributing to filling these national gaps by using probability-based sampling methods based upon jurisdiction, investigating the quality of the frame, standardizing guidelines for youth operatives, improving OATC inspection data collection methods, improving the gender distribution of youth operatives, handling the ethical dilemma of inspections in bars, and exploring the feasibility of linking compliance data with youth smoking data to explore impact of the Synar amendment. Table 2 shows how Louisiana Synar Research is addressing major national research gaps.

Table 2 National Synar Research Gaps Addressed by Louisiana Research	
National Synar Research Gaps	Louisiana Synar Research
Improve sampling methods	<ul style="list-style-type: none"> • Develop a probability sampling method based upon jurisdiction • Investigate the quality of frame
Improve data collection methods	<ul style="list-style-type: none"> • Standardize guidelines for youth operatives • Improve existing information system • Improve gender distribution of youth operatives • Handle ethical dilemma of youth operative in bar
Analyze the legislation's impact on youth smoking	Explore feasibility of linking with youth tobacco data

This study is a collaborative effort between the State Department of Health, Office of Addictive Disorders, and the State Alcohol and Tobacco Control Commission to determine the status of enforcement of the minor's access law by measuring non-compliance rates for Louisiana tobacco outlets. The non-compliance rate is defined as the proportion of all outlets at which an inspection or compliance check results in a sale, or a willingness to sell, to a youth under 18 years of age.

A stratified random sample of tobacco outlets was selected for inspection. A team of a youth operative accompanied by two adult agents conducted a cross-sectional survey of outlets. The youth operative tested the compliance for each outlet. The adult agents recorded information about the outlet and inspection event, and cited violations.

This research will use the survey data to identify the state's non-compliance rate. The non-compliance rate is a critical indicator of the success of the state's efforts to restrict minors' access to tobacco products. This research will also identify geographic areas with higher non-compliance rates than the state average in order to target merchant education and enforcement activities in the coming year.

II. METHODOLOGY

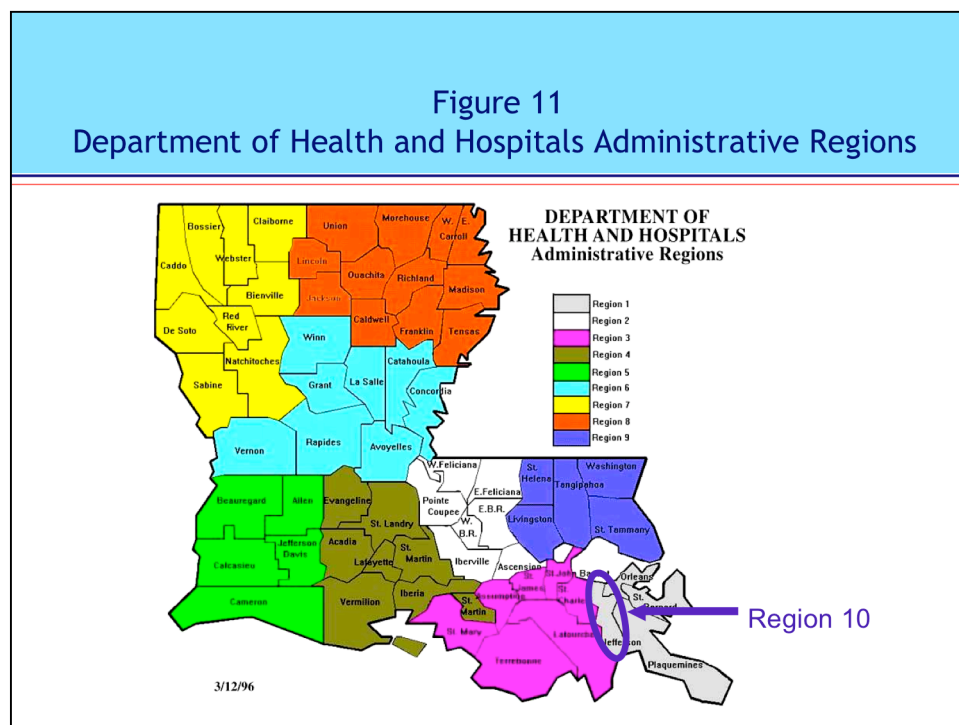
Design

The study design is a cross-sectional survey of compliance. Compliance is defined as the refusal to sell tobacco to minors and the prevention of entry of a minor to outlets restricted to youth. A stratified random sample of outlets are identified and surveyed by a team of one youth operative and two adult agents. The youth operative attempts to purchase tobacco from unrestricted outlets and tests the access of restricted outlets. The adult agents record characteristics of outlets, inspection events, and outcomes. This design is an appropriate method for measuring the rate of non-compliance and factors associated with non-compliance.

Population and Sample

Sampling design and methodology

The study uses a stratified random sampling design. Louisiana is divided into ten geographic regions, as shown in Figure 11. These 10 administrative regions comprise the strata. Simple random sampling without replacement was used to select the sample from each stratum.



Stratum sample sizes are determined proportionally to the stratum population sizes. Within strata, outlets are selected using simple random sampling without replacement and with equal probability, regardless of tobacco sales volume. This sampling method was chosen in order to maximize sampling efficiency and to provide estimates of the non-compliance rate for each region.

The sampling methodology remains essentially the same as previous years. In prior years, the design was also a stratified simple random sampling design, with the 10 administrative regions of Louisiana comprising the strata. Stratum sample sizes were determined proportionally to the stratum population size, and within strata, outlets were selected using simple random sampling without replacement, and with equal probability, regardless of tobacco sales volume. The State Tobacco License List was the source of the outlet population, with invalid addresses removed prior to sample selection to improve the accuracy of the frame. Outlets eligible for inspection included tobacco outlets not accessible to youth such as bars, lounges, and gaming establishments², with youth access tested and included in calculating the state non-compliance rate. Verification that the outlets on the sampling frame sold tobacco was determined at the point of inspection by the agents, with outlets not selling tobacco identified as ineligible and thus not checked for compliance. There were no additional methods used to locate tobacco outlets that were not on the sampling frame, as the working assumption was that only licensed outlets sold tobacco. We used the non-compliance rate for the previous year, established a 2% margin of error, and used the value of Z for a one-tailed 95% level (1.645), to calculate the effective sample size, and used a design effect for stratification of 1.33, the eligibility rate from the most recent coverage study, and a conservative estimate of the completion rate to calculate the original sample size.

The major change to sampling methodology occurred prior to the FFY 2004 inspections as a result of a policy change at the Office of Alcohol and Tobacco Control. In prior years, youth access to age-restricted tobacco outlets² such as bars, lounges, and gaming establishments, was tested by the youth operative entering the outlet and the agents determining whether the youth's age was checked by the bartender or other employee, and the youth then asked to leave. Age-restricted outlets that did not check the age of the youth and allowed the youth to stay were considered non-compliant, per CSAP guidance, and included in calculating the state non-compliance rate. In June 2003, the Office of Alcohol and Tobacco Control responded to agent and supervisor ethical concerns about exposing youth operatives to age-restricted outlets, and formulated a policy that limits the testing of youth access to age-restricted outlets to only those outlets with a doorman present at the time of inspection. This policy has narrowed the definition of outlet eligibility in the sampling frame; in the past two surveys age-restricted outlets that do not have doorman at the time of inspection were considered ineligible.

Several minor changes to sampling methodology in FFY 2004 and FFY 2005 include using a smaller margin of error (1.5% rather than 2%) to calculate the effective sample size, and using a smaller estimate of the design effect (1.25 rather than 1.33) to calculate the original sample size. In addition, in FFY 2005 and FFY 2006, a commercial business list was used to remove bars, taverns, nightclubs, adult clubs, private clubs, correctional centers, and sheriff's offices from the state tobacco license list, in order to reduce the percentage of ineligible outlets.

The source of the sampling frame

The study population includes all tobacco outlets in Louisiana that are accessible to youth. A tobacco outlet is any location that sells at retail or otherwise distributes tobacco products to consumers. Louisiana passed a law licensing all tobacco vendors, which took effect 1 July 1998, and the State Office of Alcohol and Tobacco Control Tobacco License List was used as the sampling frame to select a statewide representative sample of outlets. The list contained the name of the outlet, license number of outlet, and location of outlet (street address, town, parish, and zip code). A total of 12,798 outlets were included on the list. The total outlet number is slightly larger than the previous year (10,265 in FFY 2005).

² Adult clubs are not eligible for youth inspection, per state law.

Procedures to update the sampling frame to insure that the addresses of tobacco outlets on the sampling frame are accurate

The State Office of Alcohol and Tobacco Control Tobacco License List is regularly updated to add newly licensed outlets and to remove licensed outlets no longer selling tobacco products. At the time a business applies for a license, Alcohol and Tobacco Control verifies the address with the Department of Revenue. The Tobacco License List for selecting this year's sample was extracted 12 June 2005, and represented the most up to date and accurate outlet information available at that time.

Numbers, names, and addresses of the 12,798 outlets on the License List extracted 12 June were examined for duplicates and invalid values, after aggregating by permit number and converting 9-digit zip codes to 5-digit zip codes. There were 4,188 duplicate outlets on the list. 1,108 ineligible outlets were removed from the list by merging the Tobacco License List with a business list from InfoUSA. Outlets removed included bars, taverns, nightclubs, adult clubs, private clubs, correctional centers, and sheriff's offices. The merge with the business list yielded 7,502 eligible outlets.

Frame sources and updating methods are detailed in Table 3.

Table 3 Sources Of The List Frame			
Name of Frame Source	Type of Source	Description	Updating Method and Cycle
State Office of Alcohol and Tobacco Control Tobacco License List	3	All tobacco outlets in Louisiana that sell tobacco at retail or otherwise distribute tobacco products to consumers	ATC continuously removes non-renewed permits from the list and updates the list with new permits
InfoUSA; Hoovers; SLGN Directory Lists	1	Used to remove ineligible outlets from the list prior to sampling. Ineligible outlets include bars, taverns, night clubs, adult clubs, private clubs, correctional centers, and sheriff's offices	The InfoUSA database contains over 10 million records covering all industries in US. It is compiled from over 5,000 sources & further verified by 20 million telephone verification calls annually. Data is updated monthly. The subset of the database on bars, taverns, night clubs, adult clubs, private clubs, correctional centers, and sheriff's offices for Louisiana is used to identify ineligible outlets on the state tobacco list. Hoovers Custom Build a List of Companies and SLGN Directory Lists for Louisiana are used to remove additional outlets not identified by InfoUSA.

Source

- | | |
|-------------------------------------------|------------------------------------------|
| 1 – Statewide commercial business list | 4 – Statewide retail license/permit list |
| 2 – Local commercial business list | 5 – Statewide liquor license/permit list |
| 3 – Statewide tobacco license/permit list | 6 – Other |

The criteria used to determine accessibility of outlets to youths

Tobacco outlets that are not accessible to youth include jails, gaming establishments, and bars and lounges. In selecting the sample, a business list was used to remove ineligible outlets from the sample. If an outlet is deemed to be inaccessible to youth during the inspection process, the outlet is not inspected, and the disposition of the inspection event is coded as ineligible.

The methods used to verify that outlets identified on the sampling frame actually do sell tobacco

Verification that the outlets on the sampling frame actually do sell tobacco is determined at the point of inspection by the agents. Outlets that don't sell tobacco are identified as ineligible and are not checked for compliance.

The methods used to locate tobacco outlets that were not on the sampling frame

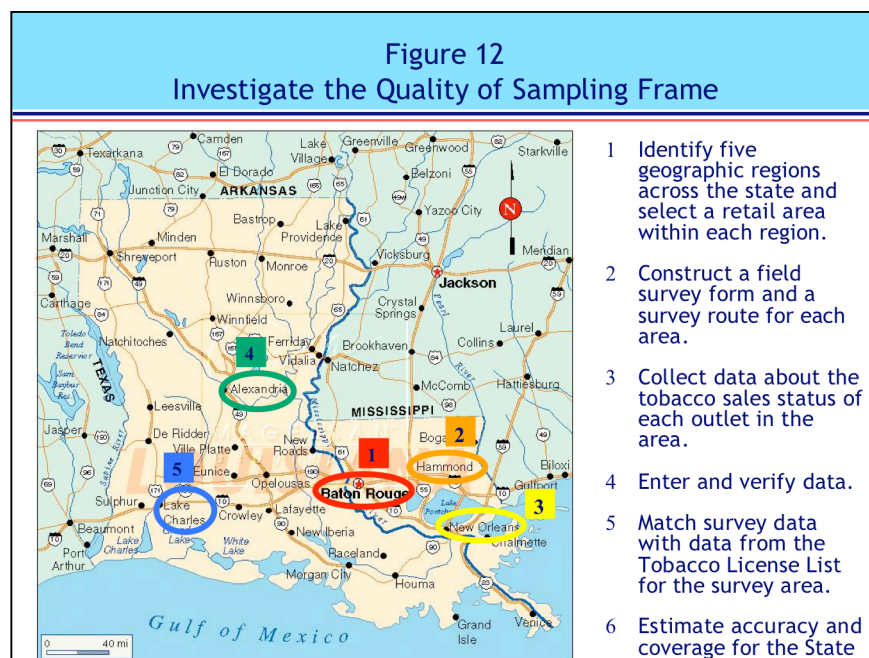
There are no additional methods used to locate tobacco outlets that were not on the sampling frame, as the working assumption is that only licensed outlets sell tobacco.

The accuracy of the frame

Of the 12,798 outlets on the Tobacco License List extracted 12 June 2005, 7,502 were eligible outlets with valid addresses, yielding an accuracy rate of 58.6% for the list. Of the sample of 1103 outlets, 905 were eligible for inspection, yielding an accuracy rate of 82.0 % in the sample. The accuracy of the list is much lower than the rate from FFY (58.6% this year compared to 95.5% in FFY 2005), reflecting changes in the OATC license management information system. The accuracy rate of the sample is higher than the rate from FFY 2005 (82.0% this year compared to 73.1% in FFY 2005), reflecting the use of additional selection criteria for InfoUSA lists to improve identification of bars, taverns, nightclubs, adult clubs, private clubs, correctional centers, and sheriff's offices in FFY 2006, thereby eliminating a greater percentage of ineligible outlets from the frame prior to selecting the sample.

The coverage of the frame

Under the Synar Regulation, states are required to assess the quality of the State Tobacco License list used as the sampling frame for the annual inspections of outlets to verify that the list covers at least 80% of all outlets that sell tobacco products. The State is required to report the accuracy of the list (the percent of outlets on the State Tobacco License List that sell tobacco products and have accurate addresses), and coverage (the percent of all eligible tobacco outlets that are included on the State Tobacco License List). The quality of the State Tobacco License list was measured in spring 2003, just preceding the FFY 2004 Synar Survey. Five geographic areas across the state were selected for the survey: (1) Baton Rouge and (2) Hammond were selected in order to use the same two areas surveyed in the first coverage study (Harris, 1999); and three additional areas were surveyed to provide a more accurate representation of the state Tobacco License List: (3) New Orleans, (4) Alexandria, and (5) Lake Charles. The coverage study used a cross-sectional design to survey outlets in the five geographic regions of the state. For each geographic region, a retail area was selected, and all outlets in the area were visited to identify whether the outlet sold tobacco products. Each retail area had at least 60 businesses, with 371 businesses surveyed overall. A field survey form was used to document the outlet name, address, and whether or not the outlet sold tobacco products, ultimately yielding 61 tobacco outlets overall. Following the fieldwork, data was entered and verified, and then merged with the state Tobacco License List to identify outlets on the list that were and were not selling tobacco products, according to field survey results. Outlets selling tobacco products that were not on the list were also identified. Figure 12 displays geographic and methodological information about investigating the quality of the sampling frame.



The accuracy rate for the state is 87.7%, ranging from 82.4% in New Orleans to 100% in Hammond. The coverage rate for the state is 82.0 % and is more variable than the accuracy rate, ranging from 62.5% in Alexandria to 88.9% in Lake Charles. The regional statistics and state rates are shown in Table 4.

Region Statistics	East Baton Rouge	Hammond	New Orleans	Alexandria	Lake Charles	State
n	15	10	17	6	9	57
a	2	0	3	1	1	7
b	2	3	2	3	1	11
% Accuracy = $100 \times (1-a/n)$	86.7	100.0	82.4	83.3	88.9	87.7
% Coverage = $100 \times (1-b/(n+a+b))$	86.7	76.9	87.5	62.5	88.9	82.0

Both accuracy rate and coverage rate have increased since the previous study done in 1999. At that time, the coverage of the list did not meet the Federal guidelines for coverage of at least 80%; in the current study, the coverage does meet Federal guidelines. In addition, the current study better represents the state by selecting 5 geographic areas rather than two, and the tobacco outlet frame increased twofold. A comparison of state rates from the current study and 1999 study is shown in Table 5.

State Statistics	1999 Study	Current Study
n	28	57
a	4	7
b	7	11
% Accuracy = $100 \times (1-a/n)$	85.7	87.7
% Coverage = $100 \times (1-b/(n+a+b))$	77.4	82.0

Although the federal guidelines require 80% coverage, 90% coverage is recommended. With ATC beginning to institute electronic field data entry of inspected outlets, it is likely that the coverage of the list will approach the recommended level in the near future.

We had planned to conduct a coverage study in fall 2005 but will be conducting the study in fall 2006 after the New Orleans area and the Lake Charles area are re-populated and have returned to normal operations.

The type of random sample design used to conduct the Synar survey

A stratified random sampling procedure was used to estimate the sample size for the compliance check study. There are 10 administrative regions in the state that divide the state into 10 homogeneous geographic locations. The regions comprise 10 strata. Simple random sampling without replacement was used to select the sample from each stratum. The outlets within each stratum were sorted by parish, town, and zip code, prior to selection.

The original and effective sample size

In calculating the effective sample size, we used the following formula:

$$n_e = \frac{1}{((e/Z)^2/p(1-p)) + 1/N}$$

where n_e is the minimum effective sample size, e is the margin of error, Z is the normal deviant corresponding to the specified precision level, p is the prevalence rate, and N is the size of the sampling frame.

We established a 1.5% margin of error, used the value of Z for a one-tailed 95% level (1.645), used the 7.4% non-compliance rate for FFY 2005, and the sampling frame size of 7502. This yielded an effective sample size of 743:

$$n_e = \frac{1}{((.015/1.645)^2/.074(1-.074)) + 1/7502} = 743$$

To account for the design, eligibility rates, and completion rates, we used the following formula:

$$n_o = \frac{d}{r_e * r_c} (n_e)$$

where n_o is the minimum original sample size, d is the design effect, r_e is the eligibility rate, r_c is the completion rate, and n_e is the effective sample size.

We then calculated an original sample size using a design effect for stratification of 1.25, using the eligibility rate from the most recent coverage study of 87.7%, and the completion rate from last year's survey of 96.0%. This yielded an original sample size of 1103:

$$n_o = \frac{1.25}{(.877 * .960)} * 743 = 1103$$

The final sample was allocated within the 10 different strata using the proportional allocation procedure according to the stratum size of outlets in the population.

$$n_i = n(N_i/N)$$

where n_i is the sample size for the i th stratum, n is the total sample size for Louisiana, N_i is the number of outlets in the i th stratum, and N is the total number of outlets in Louisiana

Simple random sampling without replacement was used to select the sample from each stratum. The sample is shown in Table 6.

Table 6 Distribution Of Tobacco Outlets By Stratum For Louisiana			
Strata	Geographic Sampling Unit	Total Number Of Outlets (N_i)	Sample Outlets (N_i)
1	Orleans, Plaquemines, St. Bernard	1,135	167
2	Ascension, East Baton Rouge, East Feliciana, Iberville, Pointe Coupee, West Baton Rouge, West Feliciana	915	134
3	Assumption, Lafourche, St. Charles, St. James, St. John the Baptist, St. Mary, Terrebonne	703	103
4	Acadia, Evangeline, Iberia, Lafayette, St. Landry, St. Martin, Vermilion	1,016	149
5	Allen, Beauregard, Calcasieu, Cameron, Jefferson Davis	438	64
6	Avoyelles, Catahoula, Concordia, Grant, LaSalle, Rapides, Vernon, Winn	501	74
7	Bienville, Bossier, Caddo, Claiborne, DeSoto, Natchitoches, Red River, Sabine, Webster	864	127
8	Caldwell, East Carroll, Franklin, Jackson, Lincoln, Madison, Morehouse, Ouachita, Richland, Tensas, Union, West Carroll	553	81
9	Livingston, St. Helena, St. Tammany, Tangipahoa, Washington	729	107
10	Jefferson	648	95
Total		7,502	1,103

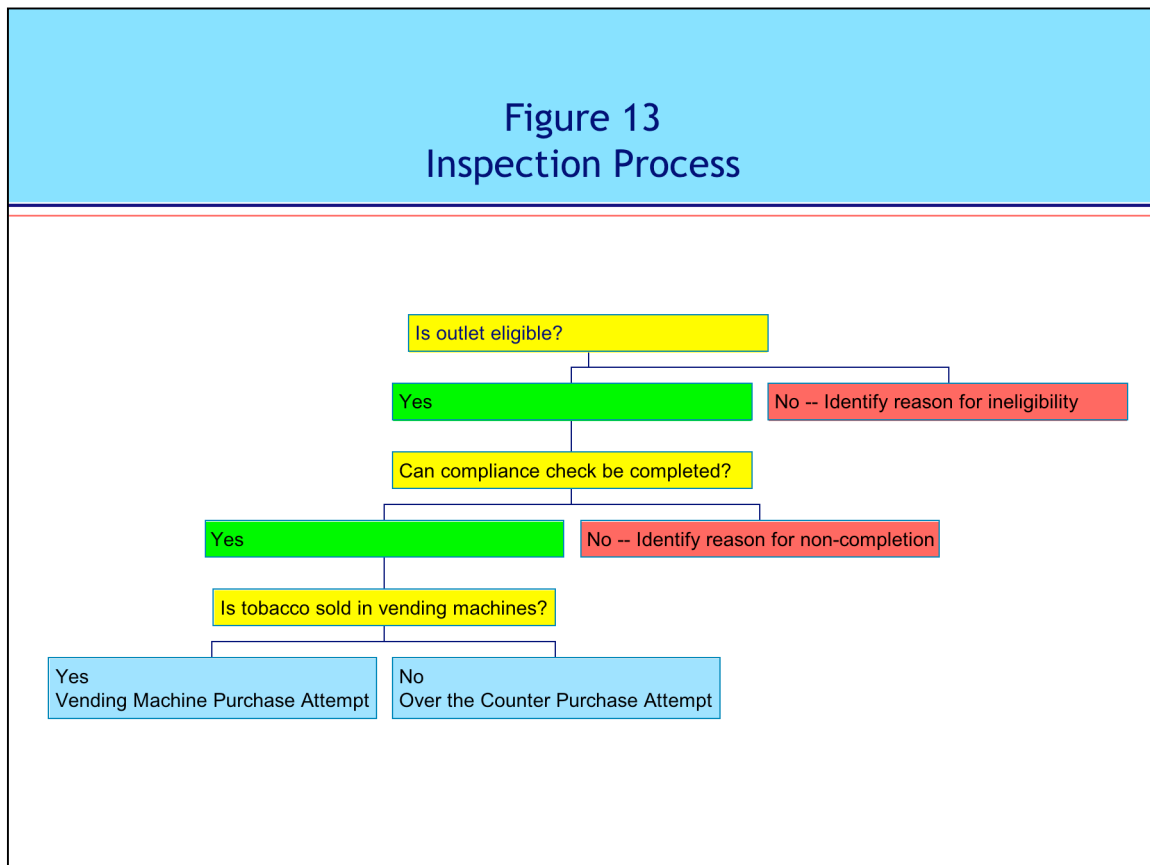
Measurement Methods

Random Unannounced Inspection Procedure

Inspection Methodology. At the point of inspection, the outlet name and address is verified. If the outlet is out of business, does not sell tobacco products, is a private facility not accessible to the public, is temporarily closed, is not located at the address, or is an adult club, the outlet is coded ineligible and the specific reason for ineligibility identified. If the outlet is in operation but closed at the time of 3 separate visits, is judged unsafe to access, or the youth inspector knows the salesperson, the outlet is coded non-complete and the specific reason for non-completion is identified.

Eligible outlets are inspected, including all outlets selling tobacco products not accessible to youth (except for adult clubs). Two commissioned OATC agents accompany the youth during attempts to purchase tobacco. One agent observes the sale, and the second stands by as backup and to record the data about the context of the attempt and results. Youth are required to carry valid identification with them and provide the identification if asked by the clerk. If the clerk instead asks for the youth's age, the youth must advise the clerk of their correct age.

When attempts to purchase tobacco were successful, the agents issued citations and summons in accordance with the State of Louisiana Alcohol and Tobacco Control Law. OATC agents enter the information on laptop computers immediately following each inspection. This data is then forwarded to the Office of Addictive Disorders for verification and analysis. Figure 13 provides details about the inspection process.

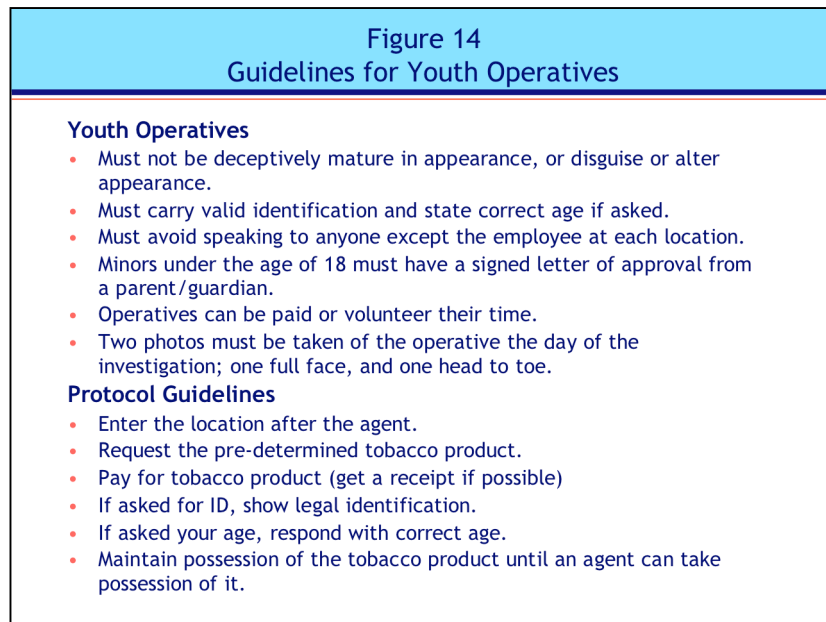


Methods to locate vending machines, how vending machines selected for sample, and the ratio of vending machine inspections to over-the-counter inspections. Vending machines in Louisiana are located in places that are accessible to youth. However, the State's license list does not distinguish between over-the-counter and vending machines for tobacco sellers. Inspection teams entering an outlet initially determine how tobacco is sold (over-the-counter assisted by a clerk; over-the-counter self-service; and vending machine). If tobacco is sold in vending machines, an attempt is made to purchase from the vending machine. As part of a vending machine attempt, the youth operative approaches the clerk to ask for change to use the vending machine. It is important to note that the ratio of vending machine inspections to over-the-counter inspections is small, 37:793 (4.7%) in FFY 2005. This is likely due to the combined effect of vending machines being harder to manage and monitor, while at the same time, being subject to more frequent compliance checks because of their location in outlets that are inspected for alcohol compliance as well as tobacco compliance.

Recruitment and Training of Youth Operatives

Recruitment and Selection of Youth Operatives. Youth operatives are recruited by OATC from youth groups, community groups, and agent contacts. The age of youth operatives ranges from 15-16 years old. The youth is photographed during the screening process to make sure that the youth's appearance reflects his/her actual age. Youth operatives can be paid or volunteer their time; those that choose to be paid are compensated at a rate of \$10.00 per hour.

Training of Youth Operatives. Youth operatives are trained and supervised by OATC agents. Agents clearly discuss the guidelines for underage operatives with the youth. In addition to requirements for underage operatives, OATC agents train youth in the tobacco compliance check protocol. Guidelines for underage operatives conducting tobacco compliance checks are shown in Figure 14.



Legal Requirements. Youth Operatives are required to be truthful. Compliance checks are conducted by law enforcement personnel as law enforcement undercover operations. OATC follows laws pertaining to undercover operations and regulations such as work laws and times. The youth operatives are cooperating individuals immune to prosecution do to the nature of the agreement with law enforcement. Youth operatives are regarded in the same manner as a confidential informant and in all cases the utmost effort is given to prevent appearance and testimony by them in court. Undercover agents witness the sale and testify to the offense.

Training of Agents

Synar Compliance Agent Training. All OATC Agents are Commissioned and Certified Law Enforcement Personnel. Agents are trained in all required law enforcement procedures and also undergo field training within the agency with senior agents, field training personnel, and supervisors. OATC does not have a formal training curriculum for compliance inspections; however, procedures for compliance inspections are outlined in the agency's Policy and Procedure Manual. Synar Compliance Training builds on the existing OATC procedures for compliance inspections with a separate training session for all OATC supervisors and agents one week prior to the Synar Survey. Additional training is warranted in order to ensure that Synar Survey methods and procedures are implemented by OATC officers with fidelity and uniformity. In FFY 2006, a day-long training was held on 12 July 2005 at the OATC Auditorium. The training included the following topics:




- Success of Synar Program in Louisiana
- Continuing Challenges
- Defining Retailer Violation Rate
- Selecting the Sample
- Collecting the Data
- Monitoring the Data
- Practice Session

All agents were certified to conduct the Synar Compliance checks based on their performance during the practice session.

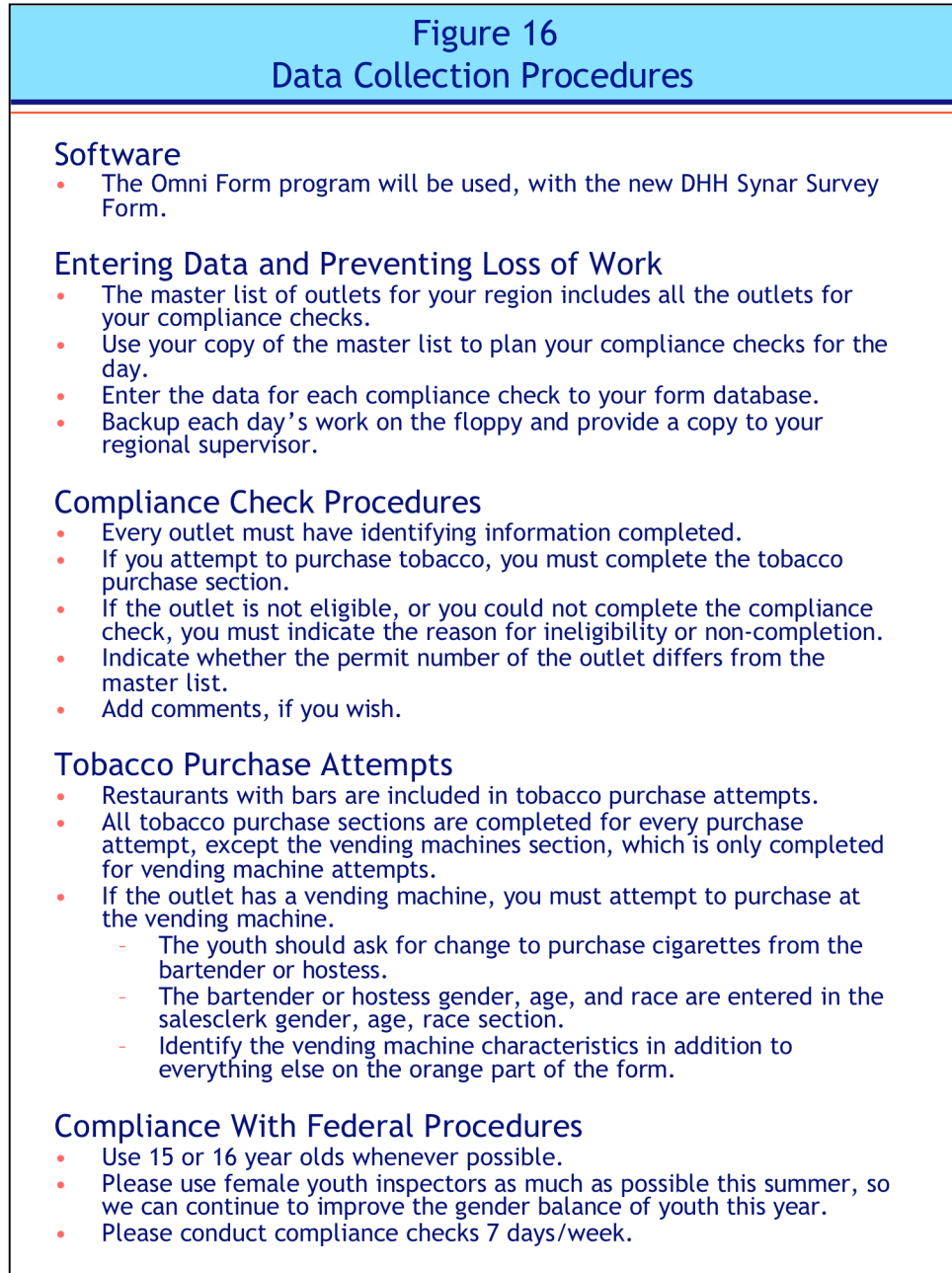
Data Collection

Developing Database Entry Form. Prior to the FFY 2004 survey, the feasibility of laptop data entry of the sampled outlets was explored, initially with OATC staff officers, and then through a focus group with the regional supervisors. The two major reasons for moving to electronic data entry were to improve accuracy and timeliness of the survey results, and to reduce agent burden. There was unanimous support to develop an electronic data entry system from both OATC headquarters and the regional supervisors. Epi Info was used to create the beta-version data entry program, and headquarters staff, headquarters technical support, and supervisors tested the program. Minor revisions were made based on beta testing, and the final version of the form was used in the FFY 2004 survey. The state decided to use OmniForm for electronic forms in fall 2003, and we migrated our EpiInfo form to OmniForm for FFY 2005 data collection. The same form was used for FFY 2006. The database entry form is shown in Figure 15.

Figure 15
Data Collection Form

 Office of Alcohol & Tobacco Control		8549 United Plaza Blvd, Suite 220 Baton Rouge, LA 70809 Compliance Check Program Tobacco Retail Survey Form					
Date: <input type="text"/> / <input type="text"/> / <input type="text"/>		Parish: <input type="text"/>		Permit Number: <input type="text"/>			
Retailer Name: <input type="text"/>		Location Address (street, city, state, & zip code): <input type="text"/>					
Type of Retailer: <input type="checkbox"/> Convenience Store w/gas <input type="checkbox"/> Convenience Store w/out gas <input type="checkbox"/> Gas Station Only <input type="checkbox"/> Hotel/Motel <input type="checkbox"/> Bar/Club <input type="checkbox"/> Small Grocery Store (family owned) <input type="checkbox"/> Small Drug Store/Pharmacy (independent) <input type="checkbox"/> Liquor Store <input type="checkbox"/> Fast Food Store <input type="checkbox"/> Restaurant <input type="checkbox"/> Chain Supermarket (Walmart, etc.) <input type="checkbox"/> Chain Drug Store/Pharmacy (Walgreens, etc.) <input type="checkbox"/> Bowling Alley/Recreation Facility/Marina <input type="checkbox"/> Franchise Discount Store (Worms, Target) <input type="checkbox"/> Tobacco Discount Retail Store <input type="checkbox"/> Restaurant/Bar <input type="checkbox"/> Other							
Time of Attempt (Military time): <input type="text"/> : <input type="text"/> HOUR		Disposition: <input type="checkbox"/> Sale <input type="checkbox"/> Other (Explain Outcome): <input type="text"/> <input type="checkbox"/> EO-Biggle & Inspection complete <input type="checkbox"/> No Sale					
Was Age Asked? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		Asked For ID? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		Type of tobacco purchased or attempted:			
				<input type="checkbox"/> Cigarettes <input type="checkbox"/> Smokeless tobacco <input type="checkbox"/> Cigar <input type="checkbox"/> Cigar pack <input type="checkbox"/> N/A			
Name of Item Purchased: <input type="text"/>						Price of Item: <input type="text"/>	
Outlet sells tobacco: <input type="checkbox"/> Over the counter, assisted by clerk <input type="checkbox"/> Not Applicable <input type="checkbox"/> Over the counter, self serve <input type="checkbox"/> Vending Machine (attempt purchase)				Type of purchase or attempt: <input type="checkbox"/> Over the counter, assisted by clerk <input type="checkbox"/> Not Applicable <input type="checkbox"/> Over the counter, self serve <input type="checkbox"/> Vending Machine			
Salesclerk Information:							
Race: <input type="checkbox"/> African-American <input type="checkbox"/> Asian <input type="checkbox"/> Caucasian <input type="checkbox"/> Hispanic <input type="checkbox"/> Middle-Eastern <input type="checkbox"/> Other <input type="checkbox"/> N/A Age: <input type="checkbox"/> Under 30 <input type="checkbox"/> 30 and Older Gender: <input type="checkbox"/> Female <input type="checkbox"/> Male							
Operative Information:							
Race: <input type="checkbox"/> African-American <input type="checkbox"/> Asian <input type="checkbox"/> Caucasian <input type="checkbox"/> Hispanic <input type="checkbox"/> Middle-Eastern <input type="checkbox"/> Other Age: <input type="checkbox"/> 15 <input type="checkbox"/> 16 <input type="checkbox"/> <input type="text"/> Gender: <input type="checkbox"/> Female <input type="checkbox"/> Male							
Store observation (circle "Yes," "No," or "N/A"):				Vending Machine (circle "Yes," "No," or "N/A"):			
Warning signs posted? <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A				Have locking device? <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A			
Vending machines present? <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A				Require special tokens? <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A			
Single cigarettes for sale? <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A				in view of an adult? <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A			
Operative ID Number: <input type="text"/>		Ranking Agent Badge Number: <input type="text"/>		Agent Badge Number: <input type="text"/>			
Administrative Citation #: <input type="text"/>		Issuing Agent #: <input type="text"/>		Misdemeanor Summons #: <input type="text"/>		Issuing Agent #: <input type="text"/>	
EVP Card# or Time Employed by Permittee (if applicable): <input type="text"/>				Seller/Suspect Name (if applicable): <input type="text"/>			
Region Supervisor: <input type="text"/>						Contact Phone Number: (<input type="text"/>) <input type="text"/>	
Comment(s): <input type="text"/>							
<input type="text"/>							
<input type="text"/>							
<input type="text"/>							

Data Collection Procedures. Information about software, process of entering data, compliance check procedures, tobacco purchase attempts, and compliance with Federal procedures is included in Figure 16.



Monitoring Data Collection. Three layers of monitoring are developed to ensure accuracy of the data. Each agent checks the form before submitting the form to his/her supervisor. Then, the supervisor reviews the form before sending the form to ATC headquarters. Finally, the State Synar Coordinator reviews each form before sending to the Synar Principal Investigator.

Data Management & Analysis

Data Entry

OATC agents were responsible for completing each electronic form in its entirety after the purchase or purchase attempt.

Data Management And Verification

Frequency distributions of all variables were generated to check for missing and out-of-range values. The comment section of each record was reviewed to edit data as needed, and missing data was added from data entry logs and personal communications with OATC. Logical consistency checks were run, and discrepancies resolved in consultation with OATC. Analytic variables were constructed as needed. The variables included in the analytic dataset are shown in Figure 17.

Figure 17 Analytic Dataset
<p>General Information</p> <ul style="list-style-type: none"> • Permit number • Merchant name • Address • Type of outlet • Date and time of inspection • Adult agents • Youth operative • Gender, age, and race of youth operative • Disposition (ie purchase attempt, youth access tested, ineligible, not completed) <p>Purchase Attempt</p> <ul style="list-style-type: none"> • How outlet sells tobacco • Type of purchase attempt • Gender, age, and race of sales clerk • Characteristics of vending machines (for vending machine attempts only) • Posting of warning signs • Whether the minor's identification was requested • Whether the minor's age was asked • Disposition of the attempt • Type of tobacco purchased (for violations only) • Citation number (for violations only) <p>Ineligible or Non-complete Outlets</p> <ul style="list-style-type: none"> • Reason for ineligibility • Reason for non-completion

Data Analysis

Frequency distributions were run to describe eligibility and completion rates, characteristics of outlets and inspection events, and the non-compliance rate. The SSES program was used to calculate survey estimates and sample sizes, survey results by stratum, and by OTC/VM, survey sample tally summary, and survey inspection results by youth inspector characteristics.

III. FINDINGS

Eligibility and Completion Rates

Synar Sample. The sample included 1103 outlets from the Tobacco License List that were selected via stratified random sampling, with each stratum one of the 10 administrative regions for the State Department of Health and Hospitals. Sample outlets were distributed by parish within each region as shown in Table 7.

Region	Parish	Sample Outlets	Region	Parish	Sample Outlets
1	Orleans	148	6	Avoyelles	12
	Plaquemines	9		Catahoula	4
	St. Bernard	10		Concordia	4
	<i>Region 1 Subtotal</i>	167		Grant	4
2	Ascension	13		LaSalle	7
	East Baton Rouge	77		Rapides	34
	East Feliciana	8		Vernon	7
	Iberville	15		Winn	2
	Pointe Coupee	9		<i>Region 6 Subtotal</i>	74
	West Baton Rouge	10	7	Bienville	4
	West Feliciana	3		Bossier	24
	<i>Region 2 Subtotal</i>	135		Caddo	55
3	Assumption	6		Claiborne	4
	Lafourche	25		DeSoto	5
	St. Charles	14		Natchitoches	12
	St. James	7		Red River	5
	St. John the Baptist	8		Sabine	4
	St. Mary	17		Webster	14
	Terrebonne	26		<i>Region 7 Subtotal</i>	127
	<i>Region 3 Subtotal</i>	103	8	Caldwell	3
4	Acadia	13		East Carroll	6
	Evangeline	10		Franklin	4
	Iberia	23		Jackson	8
	Lafayette	40		Lincoln	6
	St. Landry	24		Madison	4
	St. Martin	22		Morehouse	11
	Vermilion	17		Ouachita	25
	<i>Region 4 Subtotal</i>	149		Richland	4
5	Allen	5		Tensas	3
	Beauregard	7		Union	5
	Calcasieu	43		West Carroll	2
	Cameron	2		<i>Region 8 Subtotal</i>	81
	Jefferson Davis	8	9	Livingston	21
	<i>Region 5 Subtotal</i>	65		St. Helena	5
				St. Tammany	49
				Tangipahoa	25
				Washington	7
				<i>Region 9 Subtotal</i>	107
			10	Jefferson	95

Synar Inspection Timeline. The Synar inspections for the annual survey were conducted from 13 July 2005 to 12 August 2005. The timing of the survey has not changed substantially from previous years. For the last several years, OATC has been given the Synar sample the first week of July and allowed four to six weeks to complete the inspections. In FFY 2006 OATC was given the sample on 12 July, and inspections were completed within 4 weeks. Figure 18 shows the number of outlets inspected during the survey period.

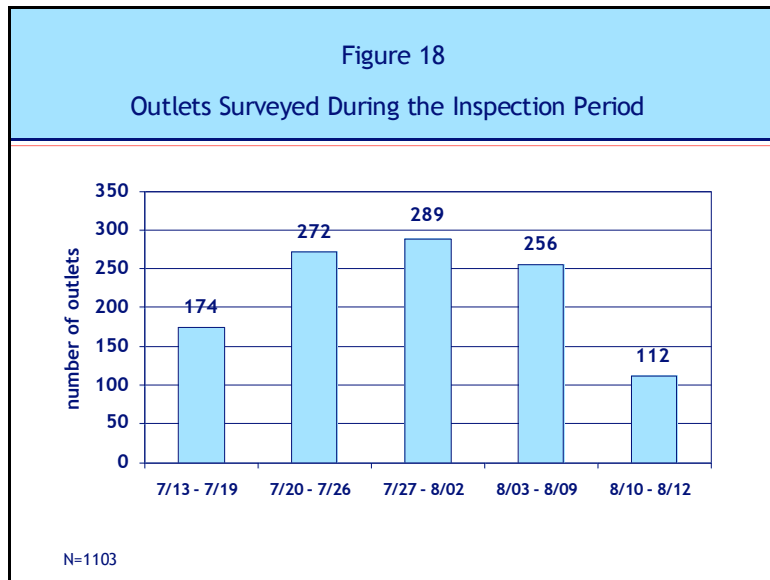


Figure 19 shows the distribution of inspected outlets by day of the week. Inspections were not distributed evenly over the week, with most inspections midweek, and very few inspections on weekends.

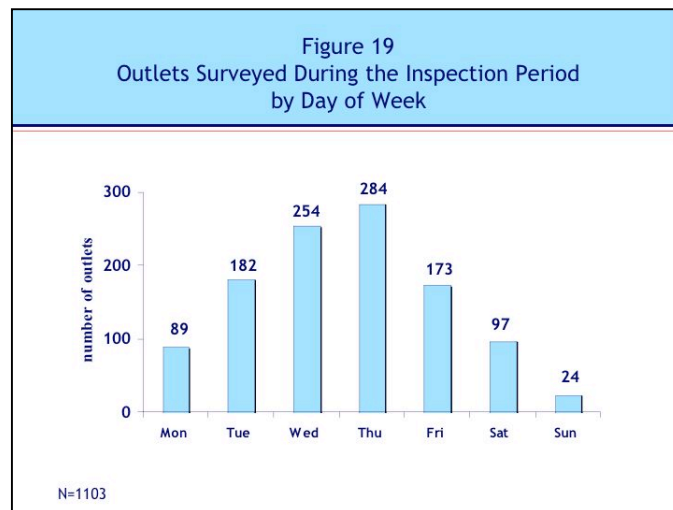
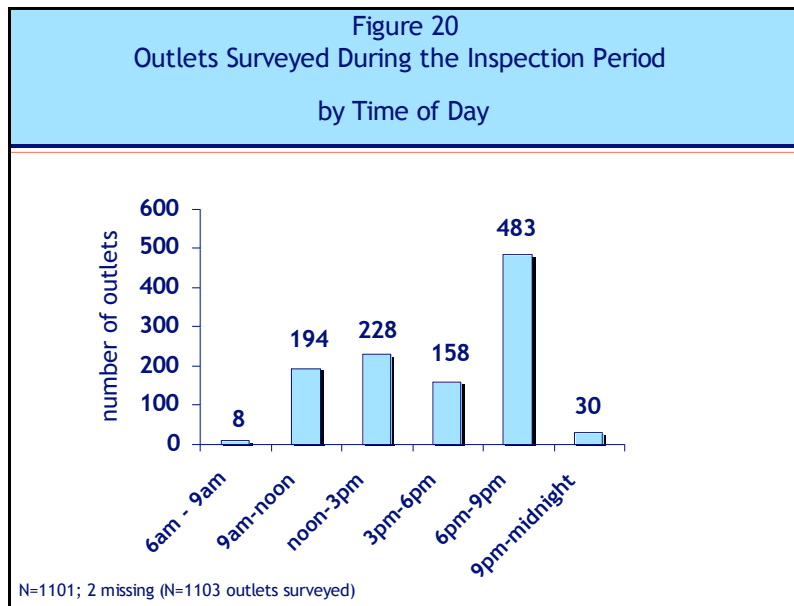
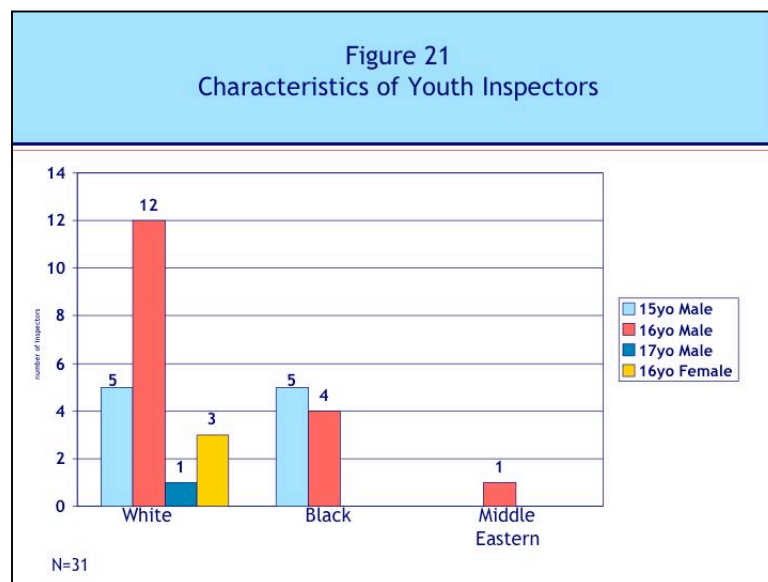


Figure 20 shows the distribution of inspected outlets by time of day. Inspections were not distributed evenly over the inspection day, with almost half of all inspections done in the late evening, from 6pm - 9pm. The fewest inspections were completed in the early morning, from 6am-9am, and late night, from 9pm to midnight.

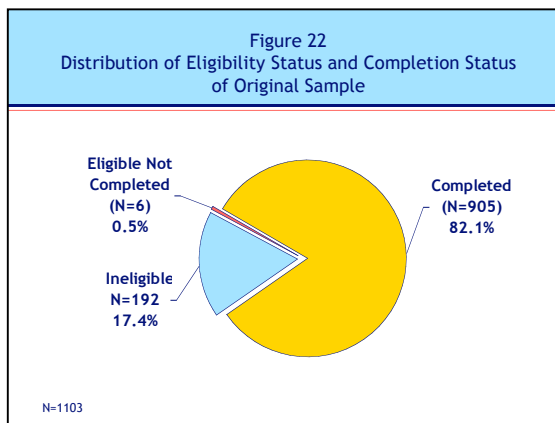


A youth inspector directly supervised by two agents from the Office of Alcohol and tobacco Control completed inspections of each of the sample outlets. In total, 31 youth operatives were involved in the inspections. 90.3% of the youth inspectors were male (N=28), 64.5% were 16 years old (n=20), 32.3% were 15 years old (n=10) and 3.2% were 17 years old (n=1). 67.7% of inspectors were white (n=21), 29.0% were African American (n=9), and 3.2% were Middle Eastern (n=1). The characteristics of the youth inspectors are shown in Figure 21.



Difference between the original and effective sample size

At the point of inspection, the outlet name and address is verified. If the outlet is out of business, does not sell tobacco products, is a private facility not accessible to the public, is temporarily closed, is not located at the address, or is an adult club, the outlet is coded ineligible and the specific reason for ineligibility identified. If the outlet is in operation but closed at the time of 3 separate visits, is judged unsafe to access, or the youth inspector knows the salesperson, the outlet is coded non-complete and the specific reason for non-completion is identified. Eligible outlets are inspected, with a youth purchase attempt at outlets selling tobacco products and a youth entry attempt at age-restricted outlets with a doorman present at the time of inspection. The distribution of the original sample is shown in Figure 22 and Form 1. 82.1% (n=905) of the original sample of 1103 outlets were eligible for inspection and were inspected, 17.4% (n=192) were ineligible for inspection, and less than 1% (n=6) were eligible for inspection but not completed. 99.3% of the eligible outlets in the sample were inspected.



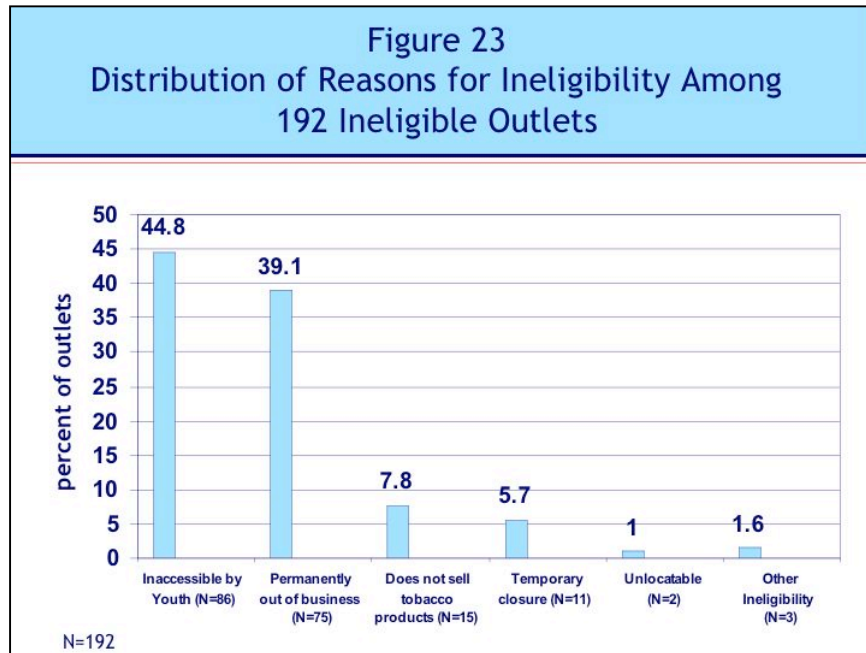
SSES Table 3 (Synar Survey Sample Tally Summary)

STATE: Louisiana
FFY: 2006

Disposition Code	Description	Count	Subtotal
EC	Eligible and inspection complete outlet	905	
Total (Eligible Completes)			905
N1	In operation but closed at time of visit	1	
N2	Unsafe to access	0	
N3	Presence of police	0	
N4	Youth inspector knows salesperson	0	
N5	Moved to new location but not inspected	0	
N6	Drive thru only/youth inspector has no drivers license	2	
N7	Tobacco out of stock	1	
N8	Run out of time	0	
N9	Other noncompletion	2	
Total (Eligible Noncompletes)			6
I1	Out of Business	75	
I2	Does not sell tobacco products	15	
I3	Inaccessible by youth	86	
I4	Private club or private residence	0	
I5	Temporary closure	11	
I6	Unlocatable	2	
I7	Wholesale only/Carton sale only	0	
I8	Vending machine broken	0	
I9	Duplicate	0	
I10	Other ineligibility (see below)	3	
Total (Ineligibles)			192
Grand Total			1103

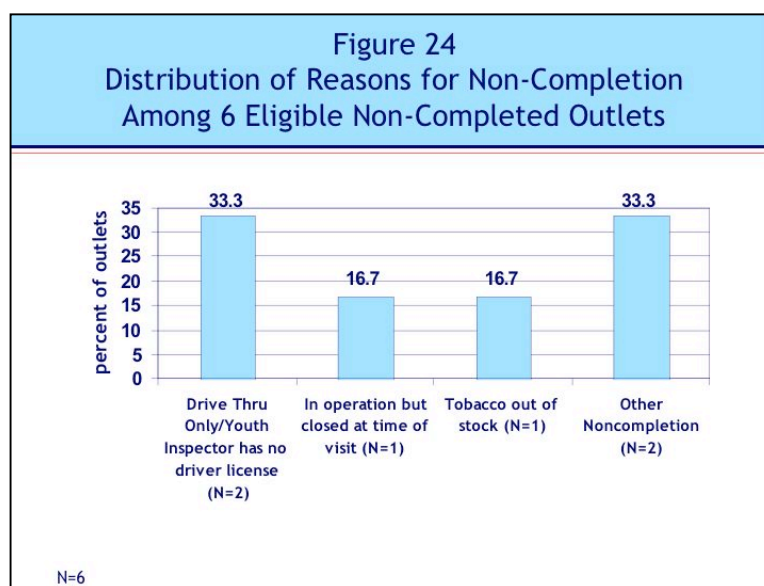
The number of inspections that were not completed because the outlets were ineligible and the reasons for ineligibility

17.4% of outlets in the original sample were not inspected because the outlets were ineligible for inspection. Figure 23 displays the reasons for ineligibility.



The number of eligible but not-completed inspections and reasons for non-completion

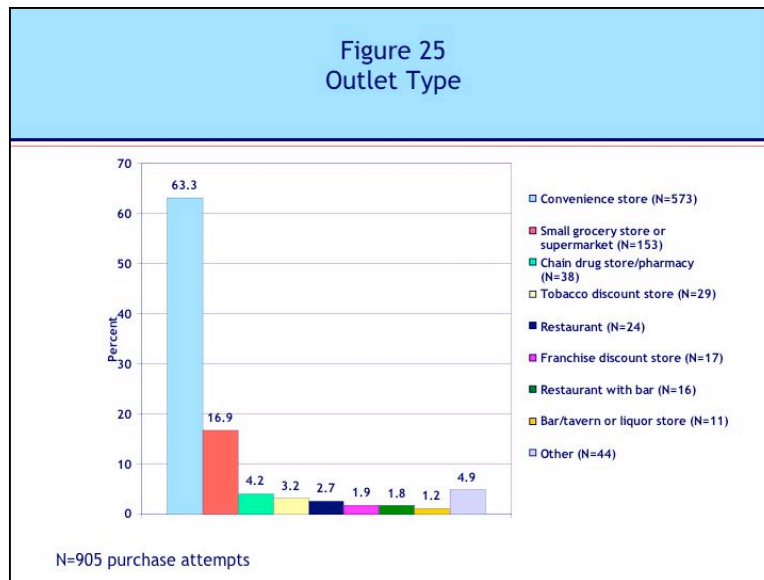
Less than 1% of outlets in the original sample that were eligible for inspection were not inspected. Figure 24 displays the reasons for non-completion.



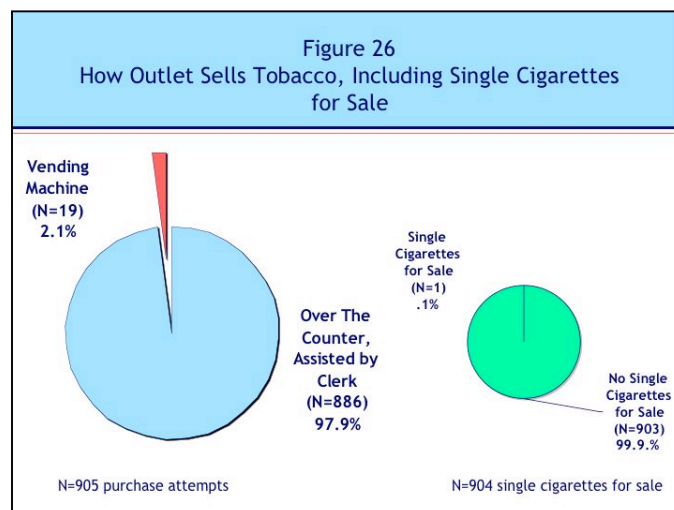
Characteristics of Outlets and Inspection Events

Characteristics of outlets

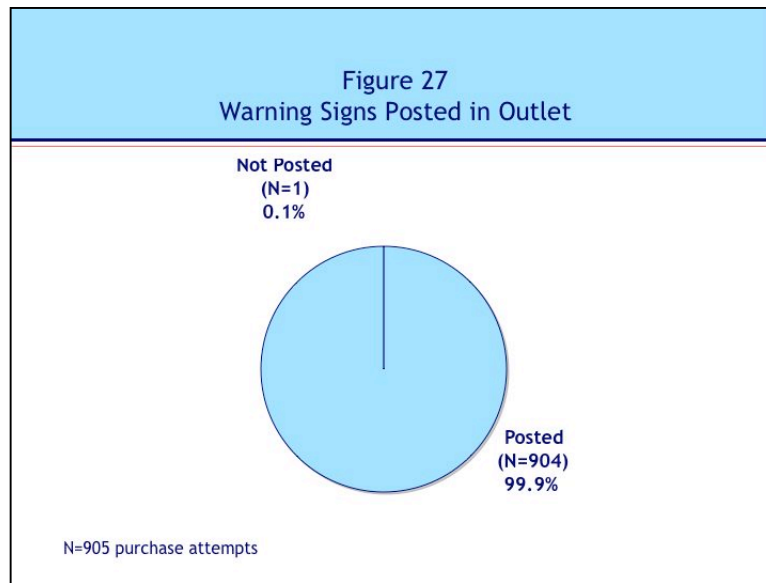
Outlet type. The predominant types of outlets in the subsample of 905 purchase attempts were convenience stores (63.3%). 16.9% of the outlets were small grocery stores or supermarkets. The distribution of outlets is shown in Figure 25.



How tobacco sold. Most of the time tobacco is sold over-the counter, assisted by a salesclerk (97.9%, n=886). The remaining outlets sold tobacco in vending machines (2.1%, n=19). Less than 1 percent of all outlets in the subsample for tobacco purchases attempts sold single cigarettes (0.1%, n=1). Figure 26 displays information about how tobacco is sold.

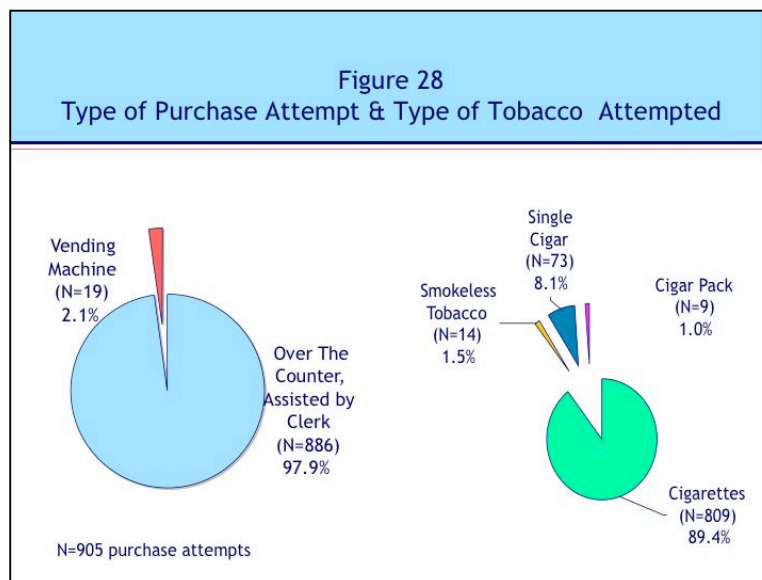


Warning Signs. Most of the time, federally-mandated warning signs were posted (99.9%, n=904).

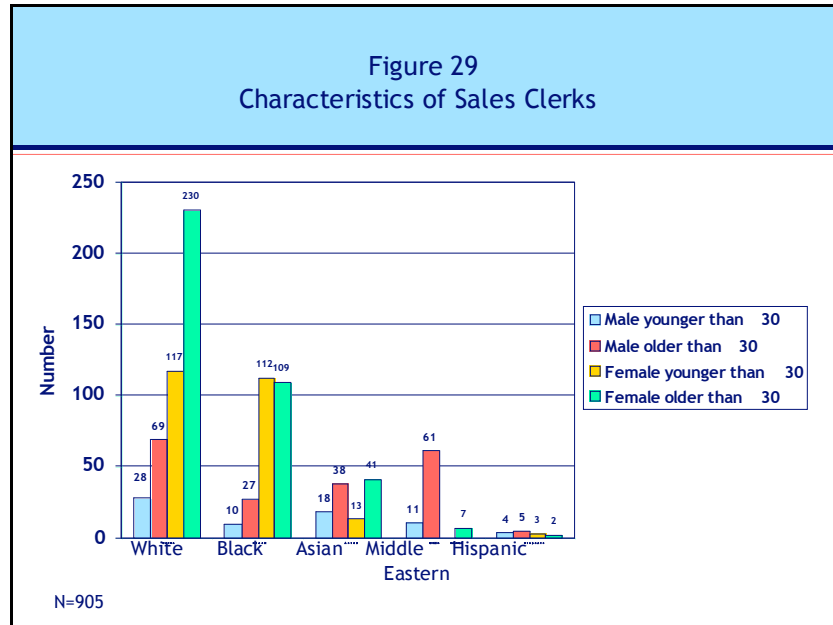


Characteristics of the inspection event

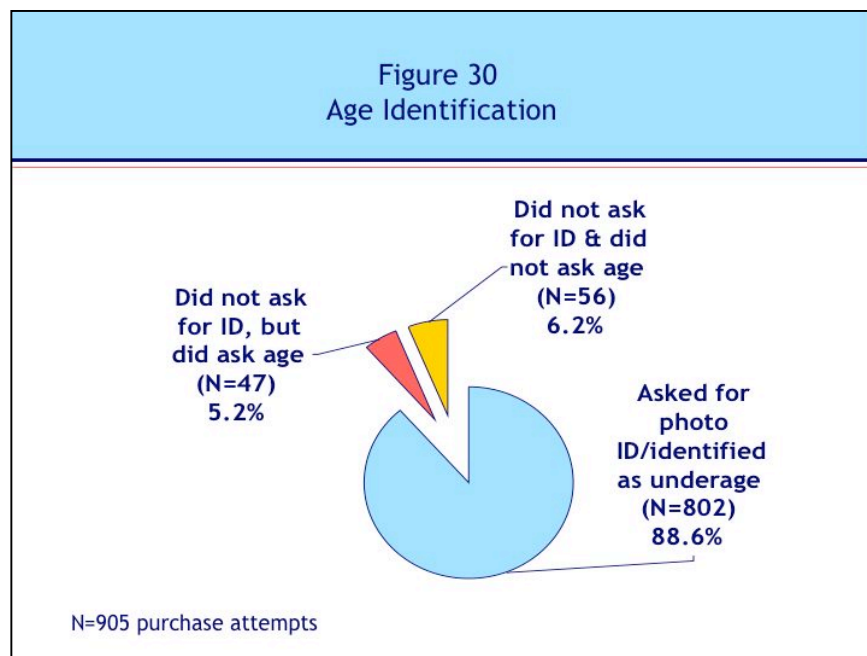
Purchase attempt. Most of the time, the purchase attempt was over the counter, assisted by salesclerk (97.9%, n=886). Only 2.1% (n=19) of all attempts involved vending machines, reflecting the low rate of vending machines currently in tobacco outlets. Figure 28 shows the type of purchase attempt and type of tobacco attempted.



Salesclerk characteristics. Most of the purchase attempts involved white female salesclerks older than 30, white female salesclerks 30 or younger, African American females 30 or younger, or African American salesclerks older than 30. 70.1% (n=634) of all purchase attempts involved female salesclerks, 65.1% (n=589) of the purchase attempts involved salesclerks older than 30, and 49.1% of the purchase attempts involved white salesclerks (n=444). The demographic characteristics of salesclerks are shown in Figure 29.



Age Identification. Most of the time, salesclerk requested photo identification to verify the youth's age (88.6%), as shown in Figure 30.



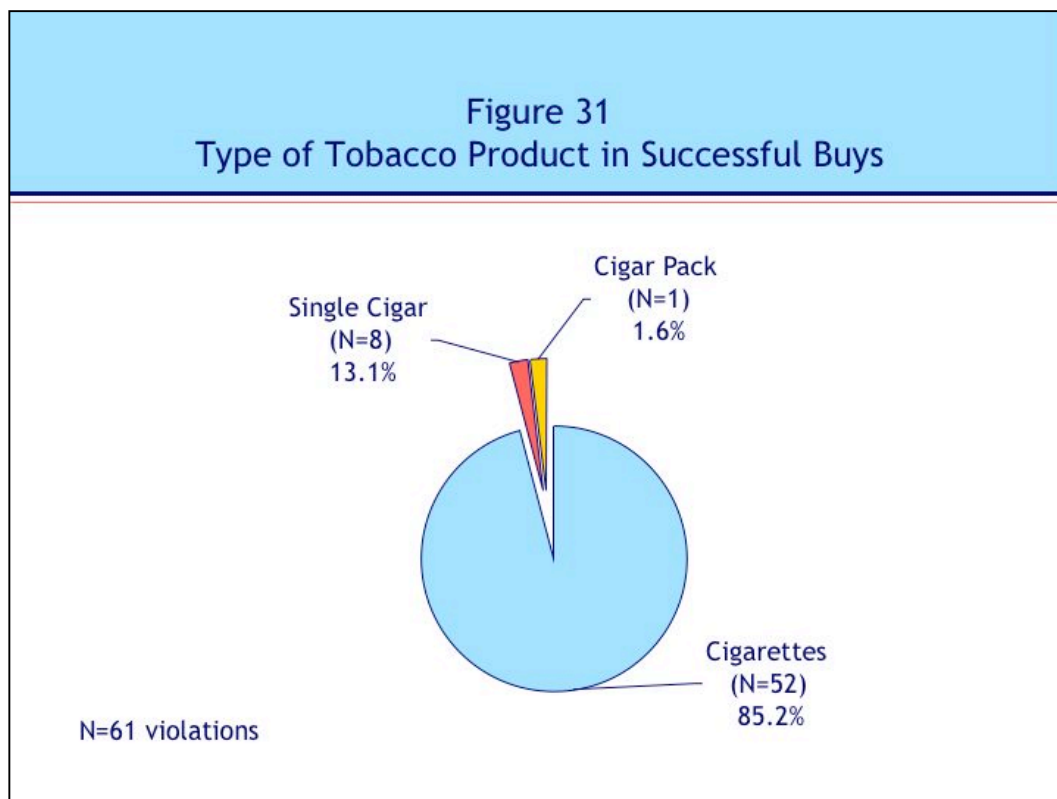
Non-Compliance Rate

Unweighted Non-Compliance Rate

1103 outlets were selected by random sampling from 10 strata representing the administrative geographic regions of Louisiana. 61 of the inspected eligible outlets were non-compliant, yielding an unweighted non-compliance rate of 6.7%.

Type of Tobacco Product in Successful Buys

Of the 61 non-compliant outlets, 85.2% of the violations involved the successful buy of cigarettes, 13.1% involved the successful buy of a single cigar, and 1.6% involved the successful buy of a cigar pack. All non-compliant outlets were given a citation for Administrative Violation 26:911a1, Louisiana ATC Title 26 Administrative Law, Sales of Tobacco to Underage, and all sellers were given a citation for Criminal Offense 14:91.8, Louisiana Title 14 Criminal Law, Sales of Tobacco to Underage. The distribution of type of tobacco product in successful buys is shown in Figure 31.



Weighted Non-Compliance Rate

The formula for the weighted variance of a proportion is:

$$\text{var}(p_w) = SW_h^2 (1-f_h) [p_h(1-p_h)/n_h - 1]$$

where: p =proportion, w =weighted, W =weight, h =stratum, f =sampling fraction, and n =sample size.

The formula for the standard error is:

$$\text{se}(p_w) = \sqrt{\text{var}(p_w)}$$

A 95% confidence interval (ci) was calculated, assuming a one-tailed distribution, using the formula:

$$\text{ci} = p + z[\text{se}(p)]$$

where: $z=1.645$

SSES Table 1 shows the Synar Survey Estimates and Sample Sizes.

SSES Table 1 (Synar Survey Estimates and Sample Sizes)

CSAP-SYNAR REPORT		
State	Louisiana	
Federal Fiscal Year (FFY)	2006	
Date	10/31/05 6:27	
Data	final 1103 for sses.xls	
Analysis Option	Stratified SRS with FPC	
Estimates		
Unweighted Retailer Violation Rate	6.7%	
Weighted Retailer Violation Rate	6.7%	
Standard Error	0.8%	
Is SAMHSA Precision Requirement met?	YES	
Right-sided 95% Confidence Interval	[0.0%, 8.0%]	
Two-sided 95% Confidence Interval	[5.2%, 8.2%]	
Design Effect	1.0	
Accuracy Rate (unweighted)	82.6%	
Accuracy Rate (weighted)	82.6%	
Completion Rate (unweighted)	99.3%	
Sample Size for Current Year		
Effective Sample Size	824	
Target (Minimum) Sample Size	1,103	
Original Sample Size	1,103	
Eligible Sample Size	911	
Final Sample Size	905	
Overall Sampling Rate	14.6%	

Unweighted Non-Compliance Rate by Region

There were 61 non-compliant outlets. SSES Table 2 presents the results by geographic sampling unit, i.e., the 10 administrative regions for the Department of Health and Hospitals, and calculates the unweighted retailer violation.

SSES Table 2 (Synar Survey Results by Stratum and by OTC/VM)

STATE: Louisiana
FFY: 2006

Samp. Stratum	Var. Stratum	Outlet Frame Size	Estimated Outlet Population Size	Number of PSU Clusters Created	Number of PSU Clusters in Sample	Outlet Sample Size	Number of Eligible Outlets in Sample	Number of Sample Outlets Inspected	Number of Sample Outlets in Violation	Retailer Violation Rate(%)	Standard Error(%)
All Outlets											
1	1	1,135	890	N/A	N/A	167	131	131	5	3.8%	
2	2	915	773	N/A	N/A	135	114	113	2	1.8%	
3	3	703	546	N/A	N/A	103	80	79	5	6.3%	
4	4	1,016	811	N/A	N/A	149	119	116	4	3.4%	
5	5	438	398	N/A	N/A	65	59	59	14	23.7%	
6	6	501	433	N/A	N/A	74	64	64	6	9.4%	
7	7	864	762	N/A	N/A	127	112	111	6	5.4%	
8	8	553	519	N/A	N/A	81	76	76	6	7.9%	
9	9	729	545	N/A	N/A	107	80	80	5	6.3%	
10	10	648	519	N/A	N/A	95	76	76	8	10.5%	
Total		7,502	6,196			1,103	911	905	61	6.7%	0.8%
Over the Counter Outlets											
1	1	1,135	836	N/A	N/A	123	123	123	5	4.1%	
2	2	915	766	N/A	N/A	112	112	112	2	1.8%	
3	3	703	532	N/A	N/A	77	77	77	4	5.2%	
4	4	1,016	811	N/A	N/A	116	116	116	4	3.4%	
5	5	438	391	N/A	N/A	58	58	58	13	22.4%	
6	6	501	433	N/A	N/A	64	64	64	6	9.4%	
7	7	864	762	N/A	N/A	111	111	111	6	5.4%	
8	8	553	519	N/A	N/A	76	76	76	6	7.9%	
9	9	729	545	N/A	N/A	80	80	80	5	6.3%	
10	10	648	471	N/A	N/A	69	69	69	6	8.7%	
Total		7,502	6,066			886	886	886	57	6.4%	0.8%
Vending Machines											
1	1	0	54	N/A	N/A	8	8	8	0	0.0%	
2	2	0	7	N/A	N/A	1	1	1	0	0.0%	
3	3	0	14	N/A	N/A	2	2	2	1	50.0%	
4	4	0	0	N/A	N/A	0	0	0	0	0.0%	
5	5	0	7	N/A	N/A	1	1	1	1	100.0%	
6	6	0	0	N/A	N/A	0	0	0	0	0.0%	
7	7	0	0	N/A	N/A	0	0	0	0	0.0%	
8	8	0	0	N/A	N/A	0	0	0	0	0.0%	
9	9	0	0	N/A	N/A	0	0	0	0	0.0%	
10	10	0	48	N/A	N/A	7	7	7	2	28.6%	
Total		0	130			19	19	19	4	21.1%	8.6%

Note: There are some records with unknown outlet type. Therefore the overall counts may not equal the sum of OTC and VM counts.

There is a significant difference in rates between regions (Chi-square=43.89, $p=.000$), with Region 2 having the lowest rate of non-compliance (1.8%) and Region 5 having the highest rate of non-compliance (23.7%). There are a number of plausible explanations. At the individual level, the variation in race, gender, socioeconomic status, and education level, and concomitant tobacco use, may be associated with regional variation in demand, thus influencing merchant compliance. At the environmental level increased compliance may occur in urban areas where enforcement or merchant education has a more visible presence. In terms of the inspection event, interaction between the youth as part of the purchase attempt may influence salesclerk behavior. It is particularly important to understand whether or not youth inspector behavior varies across the sample; if so, there is a need for more rigorous training of the youth inspectors. Similarly, if malleable environmental factors, such as the frequency of enforcement activities or education activities vary across the sample, there is a need to restructure the equity of Synar enforcement and/or education activities. In the upcoming survey, we will work with OATC to obtain additional information about outlet exposure to enforcement and education activities and youth inspector behavior, in order to minimize measurement error. OAD will also dedicate more resources to the regions with rates higher than the average non-compliance rate, in order to reduce the variation between regions.

Inspection Results by Youth Inspector Age and Gender

SSES Table 4 shows the distribution of outlet inspection results of attempted and successful buys by age and gender.

SSSES Table 4 (Synar Survey Inspection Results by Youth Inspector Characteristics)

STATE: Louisiana
FFY: 2006

Frequency Distribution

Gender	Age	Number of Inspectors	Attempted Buys	Successful Buys
Male	14	0	0	0
	15	10	331	12
	16	17	530	39
	17	1	9	0
	18	0	0	0
	Subtotal	28	870	51
Female	14	0	0	0
	15	0	0	0
	16	3	35	10
	17	0	0	0
	18	0	0	0
	Subtotal	3	35	10
Other		0	0	0
Grand Total		31	905	61

Buy Rate in Percent by Age and Gender

Age	Male	Female	Total
14	0.0%	0.0%	0.0%
15	3.6%	0.0%	3.6%
16	7.4%	28.6%	8.7%
17	0.0%	0.0%	0.0%
18	0.0%	0.0%	0.0%
Other			0.0%
Total	5.9%	28.6%	6.7%

It is important to note that most purchase attempts are by male youth inspectors. The gender imbalance in inspections is due to OATC policy that restricts the supervision of female youth inspectors to female adult agents; as there are only four female agents in Louisiana, the number of female youth operatives is limited. However, during FFY 2004, the four female agents were paired with male agents, and this concerted effort to reduce the gender imbalance successfully increased the proportion of attempts by female youth operatives. The rate of inspections by female youth inspectors dropped again in FFY 2005 because there are still too few female agents and scheduling did not permit for the pairing of female agents with male agents. OAD will continue its dialogue with OATC about the need to utilize more female youth operatives.

Trends in Non-Compliance

The current violation rate for Louisiana is 6.7% with a 1.5% margin of error at the one-tailed 95% confidence level. Regional rates are shown in Table 8.

Table 8 Regional Non-Compliance Rates, FFY 97 - FFY 05										
STRATUM	FFY97	FFY98	FFY99	FFY00	FFY01	FFY02	FFY03	FFY04	FFY05	FFY06
1	95.60	59.09	20.90	1.95	3.42	16.78	7.50	6.93	3.3%	3.8%
2	72.39	38.78	17.29	2.29	8.94	0.00	3.06	2.63	4.3%	1.8%
3	64.06	15.56	10.68	1.79	8.33	12.61	6.41	3.23	5.3%	6.3%
4	50.00	27.27	12.64	7.74	5.80	4.79	0.95	6.93	9.6%	3.4%
5	46.15	32.36	24.69	19.18	10.77	6.78	2.22	9.76	25.6%	23.7%
6	68.42	47.06	32.95	20.00	6.35	7.46	9.62	7.14	10.0%	9.4%
7	80.00	29.23	36.36	4.76	8.33	9.01	3.80	21.74	7.1%	5.4%
8	92.86	32.61	27.08	4.35	8.05	8.97	5.17	3.39	9.8%	7.9%
9	75.86	48.72	13.27	9.38	4.49	3.23	5.33	5.26	5.3%	6.3%
10	67.69	58.97	10.47	5.62	1.37	15.22	14.71	11.54	6.7%	10.5%
Louisiana	71.16	38.81	20.30	6.68	6.52	8.55	5.66	7.42	7.3%	6.7%

IV. Discussion

Conclusions

Methods for Measuring Non-Compliance Rate

The methods for selecting the Synar sample, the quality of the sampling frame, the structured inspection procedures, enhanced method of collecting data via laptop computers, strengthened training sessions for agents, and use of multivariate analyses to identify a set of risks for non-compliance that persist in the presence of other risks minimize bias in Louisiana's Synar Research. Therefore, strong confidence may be placed in the sharply declining non-compliance rate, and the identified risks of non-compliance.

Sharply Declining Non-Compliance Rate

The objective of this study was to estimate the non-compliance rate for tobacco sales in Louisiana among youth under age 18. This was the tenth consecutive annual study of non-compliance in Louisiana since the implementation of the Synar Amendment in FFY97. A stratified random sample of state tobacco outlets was selected and surveyed by a team consisting of a youth operative and two adult agents from the Louisiana Office of Alcohol and Tobacco Control. The youth attempted to purchase tobacco at unrestricted outlets; the agents recorded characteristics of the outlet and the inspection event, and outlets in violation received administrative citations and criminal citations. Of 911 eligible outlets in the sample, 905 were inspected, yielding a completion rate of 99.3%. 61 of the inspected outlets were non-compliant, i.e., were willing to sell tobacco to the youth operative. A weighting procedure was applied to estimate a statewide non-compliance rate, yielding a weighted rate of 6.7%. It is likely to be among the lowest non-compliance rates in the nation.

It is important to note that Louisiana had the highest non-compliance rate in the nation at baseline (72.7%). Annual targets were established to decrease the state's non-compliance rate to 20% by FFY 2002. However, Louisiana achieved 20.3% non-compliance in FFY99, only two years after the start of the Louisiana Synar Initiative, and 3 years ahead of the scheduled target date. In addition, since FFY99, Louisiana has been below the national average non-compliance rate.

Sustainability of the Decline

The State of Louisiana, through the Office for Addictive Disorders and Alcohol Tobacco Control, has been extremely successful in reducing the illegal sales of tobacco products to minors. This success involves partnership with Louisiana businesses that have responded to State law enforcement efforts. Over the past eight years, the reduction in estimated non-compliance with Louisiana's tobacco laws is marked, decreasing from the highest in the nation in FFY97 to the current rate of 6.7%. This dramatic, sustained decrease in non-compliance is one of the sharpest declines in the country, and reflects a highly effective education and enforcement program. Continued leadership in the nationwide effort will be contingent upon both maintenance of current efforts and the initiation of innovative approaches towards high-risk groups.

Challenges

Limited Resources

The Office of Alcohol and Tobacco Control has a limited number of agents to conduct compliance checks. The large rural populations make it logistically difficult for agents to conduct compliance checks in a timely manner. OATC is legally responsible for enforcing the tobacco and alcohol laws, but receives limited resources from the state to enforce these laws. Due to the limited number of OATC agents and scarce resources enforcement efforts are strained and not adequate. Because the Office for Addictive Disorders as the Single State Authority is held accountable for the Synar Regulation, OAD has had to dedicate funds to OATC to ensure that enforcement efforts are taking place. These funds are not always easily acquired.

Youth Inspector Gender

It is important to note that most purchase attempts are by male youth inspectors. The gender imbalance in inspections is due to OATC policy that restricts the supervision of female youth inspectors to female adult agents; as there are only four female agents in Louisiana, the number of female youth operatives is limited. However, during FFY 2004, the four female agents were paired with male agents, and this concerted effort to reduce the gender imbalance successfully increased the proportion of attempts by female youth operatives. The rate of inspections by female youth inspectors dropped again in FFY 2005 because there are still too few female agents and scheduling did not permit for the pairing of female agents with male agents. OAD will continue its dialogue with OATC about the need to utilize more female youth operatives.

Policy Recommendations

Law Enforcement Plans

The Office of Alcohol and Tobacco Control will conduct 2,400 tobacco compliance checks (1,108 of which are Synar inspections for the Annual Report) through contractual agreement with the Office for Addictive Disorders. Outlets for all 2400 tobacco compliance checks will be selected using stratified random sampling: 1,108 outlets will be selected using stratified random sampling for the Synar inspections during summer 2005, and the remaining 1292 outlets will be selected using stratified random sampling for enforcement evenly distributed from October 2005 - June 2006. OATC has also committed to conduct an additional 3,000 compliance checks during FFY 2006 for a total of 5,400. Citations will be issued to those found in violation. Letters of appreciation will be mailed to those merchants that are found to be in compliance.

In addition, merchants must continue to register for tobacco permits and may lose the ability to sell tobacco products if they are found non-compliant with tobacco laws.

Merchant Education Plans

As a way to educate tobacco merchants, each of the 10 regions of the State will fund a Synar Contractor that will train and supervise youth volunteers to conduct unconsummated compliance checks. Each of the 10 Synar Contractors will conduct a minimum of 350 unconsummated compliance checks to include the following: 250 cigarette purchase attempts, 65 smokeless tobacco purchase attempts, and 35 cigar purchase attempts.

During unconsummated compliance checks, these merchants will be provided Thank You and No Thank You cards, educational cards, and certificates as appropriate. These merchants will also be provided an educational packet including written materials, window decals, and stickers regarding the current laws and goals of the Synar Amendment.

Community Education Plans

As the single state authority for the treatment and prevention of substance abuse, OAD will contract with at least 40 primary prevention providers. These contractors will provide services in the programmatic areas of Information Dissemination, Education, Alternative Activities, Problem Identification and Referral, Community-based Process and Environmental and will be required to address the prevention of alcohol, tobacco, and other drugs (ATOD).

OAD will continue to sponsor Regional Teen Institutes (RTI). Approximately 500 youth (ages 14 to 17) and adult sponsors will participate in RTI. The purpose of RTI is to provide teams of youth and adults with the knowledge and skills to return to their community and implement programs in the area of alcohol, tobacco and other drug prevention. As a part tobacco education, RTI participants will be provided with information specific to the Synar Amendment and Louisiana's Synar Program. OAD will award mini-grants to RTI groups to support year round youth activities related to ATOD.

Media Use

The Office for Addictive Disorders will announce the results of the annual Synar Report at a press conference and a statewide press release. A copy of the report will be made available on the Office for Addictive Disorders' Web Page for public viewing.

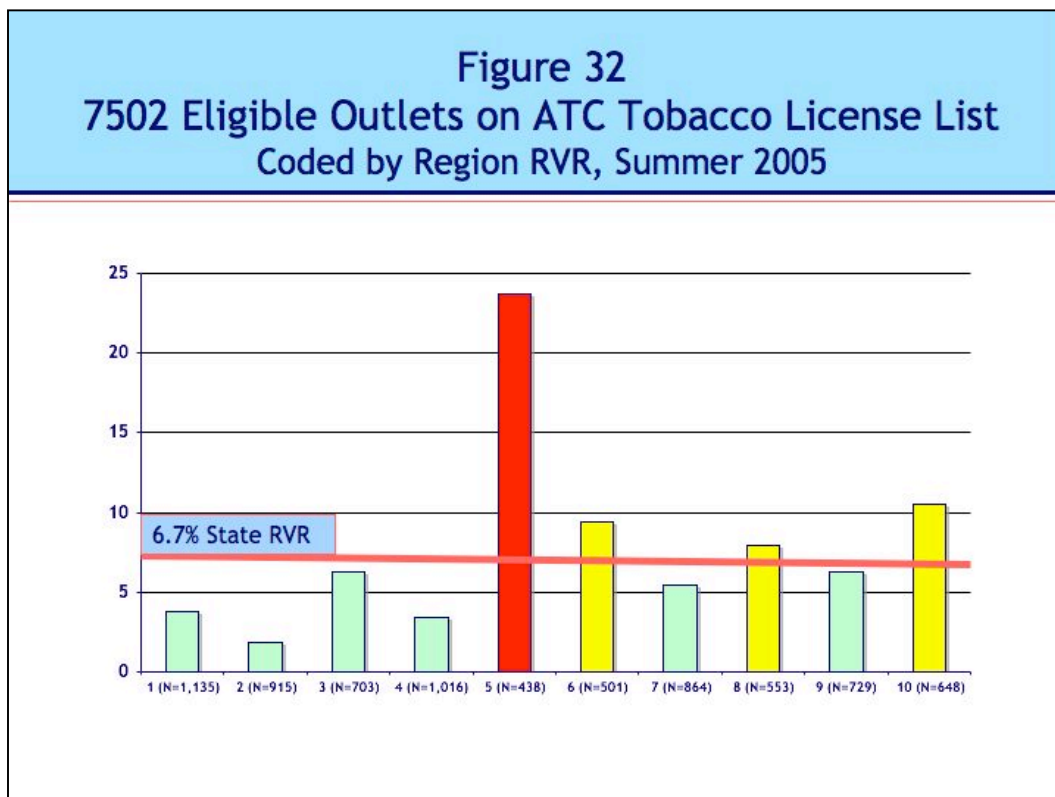
Community Mobilization Plans

During FFY 2006, each of the 10 Synar Contractors will continue to host regional Coalition meetings once per quarter. During these coalition meetings, members will receive training and information about educating merchants and conducting unconsummated compliance checks.

Targeting Synar Strategies to High-risk Areas

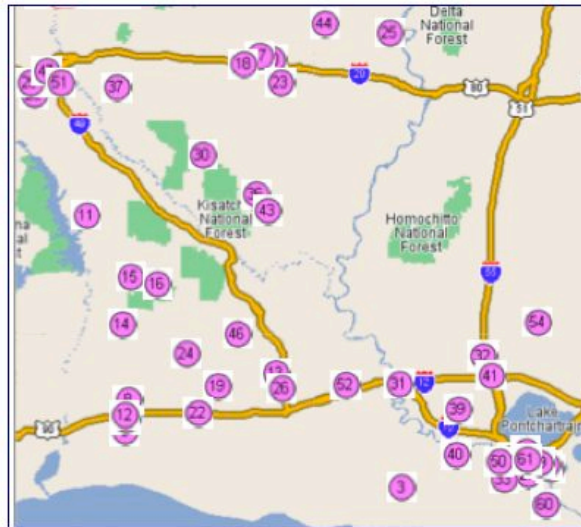
The Office of Alcohol and Tobacco Control has a limited number of agents to conduct compliance checks. The large rural populations make it logistically difficult for agents to conduct compliance checks in a timely manner. OATC is legally responsible for enforcing the tobacco and alcohol laws, but receives limited resources from the state to enforce these laws. Due to the limited number of OATC agents and scarce resources, enforcement efforts are strained and often not adequate. Because the Office for Addictive Disorders as the Single State Authority is held accountable for the Synar Regulation, OAD has had to dedicate funds to OATC to ensure that enforcement efforts are taking place. These funds are not always easily acquired. Therefore it is critical to use the state's scarce economic resources wisely.

Targeting by Regional rates. Four regions have non-compliance rates higher than the state average rates (regions 5,6,8 & 10). Region 5's rate is almost 4 times the state rate.



Targeting by Areas with Violations. The geographic distribution of violators also provides targets for additional merchant education and enforcement.

Figure 33 Violations Summer 2005



Increasing merchant education and enforcement resources to high-risk areas should continue to decrease to statewide non-compliance rate.. As the Synar rate gets lower, enhancing the universal statewide efforts with more intensive targeted efforts at high-risk areas s is imperative for continued improvement in preventing youth access to tobacco. Targeting activities is not only a significant way of further lowering the non-compliance rate, but feasible, given that the Office for Addictive Disorders and the Office of Alcohol and Tobacco Control have developed a true partnership, and the 10 Regional Synar Programs have broad and deep capacity to ensure the maintenance of a comprehensive statewide Synar program.

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