ANNUAL SYNAR REPORT

42 U.S.C. 300x-26

OMB № 0930-0222

FFY 2009

State: North Carolina

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Substance Abuse and Mental Health Services Administration
Center for Substance Abuse Prevention
www.samhsa.gov

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INTRODUCTION

The Annual Synar Report (ASR) format provides the means for States to comply with the reporting provisions of the Public Health Service Act (42 U.S.C. 300x-26) and the Tobacco Regulation for the SAPT Block Grant (45 C.F.R. 96.130 (e)).

Public reporting burden for the collection of information is estimated to average 15 hours for Section I and 3 hours for Section II, including the time for reviewing instructions, completing and reviewing the collection of information, searching existing data sources, and gathering and maintaining the data needed. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to SAMHSA Reports Clearance Officer; Paperwork Reduction Project; 1 Choke Cherry Road, 7th Floor Rockville, Maryland 20857.

An agency may not conduct or sponsor and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The OMB control number for this project is 0930-0222 with an expiration date of 10-31-2010.

How the Synar report helps the Center for Substance Abuse Prevention

In accordance with the tobacco regulations, States are required to provide detailed information on progress made in enforcing youth tobacco access laws (FFY 2008 Compliance Progress) and future plans to ensure compliance with the Synar requirements to reduce youth tobacco access rates (FFY 2009 Intended Use Plan). These data are required by 42 U.S.C. 300x-26 and will be used by the Secretary to evaluate State compliance with the statute. Part of the mission of the Center for Substance Abuse Prevention (CSAP) is to assist States[1] by supporting Synar activities and providing technical assistance helpful in determining the type of enforcement measures and control strategies that are most effective. This information is helpful to CSAP in improving technical assistance resources and expertise on enforcement efforts and tobacco control program support activities, including State Synar Program support services, through an enhanced technical assistance program involving conferences and workshops, development of training materials and guidance documents, and on-site technical assistance consultation.

How the Synar report can help States

The information gathered for the Synar report can help States describe and analyze sub-State needs for program enhancements. These data can also be used to report to the State legislature and other State and local organizations on progress made to date in enforcing youth tobacco access laws when aggregated statistical data from State Synar reports can demonstrate to the Secretary the national progress in reducing youth tobacco access problems. This information will also provide Congress with a better understanding of State progress in implementing Synar, including State difficulties and successes in enforcing retailer compliance with youth tobacco access laws.

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[1]The term State is used to refer to all the States and territories required to comply with Synar as part of the Substance Abuse Prevention and Treatment Block Grant Program requirements (42 U.S.C. 300x-64 and 45 C.F.R. 96.121).

Getting assistance in completing the Synar report

If you have questions about programmatic issues, you may call CSAP's Division of State Programs at (240) 276-2413 and ask for your respective State Project Officer, or contact your State Project Officer directly by telephone or e-mail using the directory provided in the FY 2009 Uniform Application, Appendix A. If you have questions about fiscal or grants management issues, you may call the Grants Management Officer, Office of Program Services, Division of Grants Management, at (240) 276-1422.

Where and when to submit the Synar report

The Annual Synar Report (ASR) must be received by SAMHSA no later than December 31, 2008. The ASR must be submitted in the **approved OMB report format**. Use of the approved format will avoid delays in the review and approval process. The chief executive officer (or an authorized designee) of the applicant organization must sign page 1 of the ASR certifying that the State has complied with all reporting requirements.

The State must upload one copy of the report using the online Web BGAS (Block Grant Application System). States that use the Synar Survey Estimation System (SSES) must also upload one copy of SSES Tables 1-5 (in Excel) to Web BGAS. States that do not use SSES must upload one copy of ASR Forms 1, 4 and 5, and Forms 2 and 3, if applicable, (in Excel format) to Web BGAS. Instructions on how to access the Web BGAS system are included in the attached cover letter.

Additionally, the State must submit one signed original of the report (including the signed Funding Agreements/Certifications), as well as one additional copy of the signed Funding Agreements/Certifications, to the Grants Management Officer at the address below:

Ms. Barbara Orlando
Grants Management Officer
Office of Program Services
Division of Grants Management
Substance Abuse and Mental Health Services Administration

Regular Mail:

1 Choke Cherry Road, Rm.7-1091
Rockville, Maryland 20857

Overnight Mail:

1 Choke Cherry Road, Rm.7-1091
Rockville, Maryland 20850

FFY 2009: FUNDING AGREEMENTS/CERTIFICATIONS

The following form must be signed by the Chief Executive Officer or an authorized designee and submitted with this application. Documentation authorizing a designee must be attached to the application.

[redacted]
42 U.S.C. 300x-26 requires each State to submit an annual report of its progress in meeting the requirements of the Synar Amendment and its implementing regulation (45 C.F.R. 96.130) to the Secretary of the Department of Health and Human Services. By signing below, the chief executive officer (or an authorized designee) of the applicant organization certifies that the State has complied with these reporting requirements and the certifications as set forth below.
[redacted]
The State certifies that the Synar survey sampling methodology on file with the Center for Substance Abuse Prevention and submitted with the Annual Synar Report for FFY 2009 is up-to-date and approved by the Center for Substance Abuse Prevention.
[redacted]
The State certifies that the Synar Survey Inspection Protocol on file with the Center for Substance Abuse Prevention and submitted with the Annual Synar Report for FFY 2009 is up-to-date and approved by the Center for Substance Abuse Prevention.
State: North Carolina
Name of Chief Executive Officer or Designee: Dempsey Benton
Signature of CEO or Designee:
Title: Secretary, NC Department of Health and Human Services **Date Signed:** 12-5-08
If signed by a designee, a copy of the designation must be attached.

FFY: 2009 State: NC
Date: 11/25/08

SECTION I: FFY 2008 (Compliance Progress)

YOUTH ACCESS LAWS, ACTIVITIES, AND ENFORCEMENT

42 U.S.C. 300x-26 requires the States to report information regarding the sale/distribution of tobacco products to individuals under age 18.

1. **Please indicate any changes or additions to the State tobacco statute(s) relating to youth access since the last reporting year. Please attach a photocopy of the change(s) in the State law(s) if any was made since the last reporting year** *(see 42 U.S.C. 300x-26).*

   a. **Has there been a change in the *minimum sale age* for tobacco products?**

   ☐ **Yes** ☒ **No**

   *If **Yes**, current minimum age:* ☐ 19 ☐ 20 ☐ 21

   b. **Have there been any changes in State law that impact the State's *protocol for conducting Synar inspections*?** ☐ **Yes** ☒ **No**

   *If **Yes**, indicate change. (Check all that apply.)*

   ☐ Changed to require that law enforcement conduct inspections of tobacco outlets
   ☐ Changed to make it illegal for youth to possess, purchase or receive tobacco
   ☐ Changed to require ID to purchase tobacco
   ☐ Other change(s) *(Please describe.)* _____

   c. **Have there been any changes in the law concerning *vending machines*?**

   ☐ **Yes** ☒ **No**

   *If **Yes**, indicate change. (Check all that apply.)*

   ☐ Total ban enacted
   ☐ Banned from location(s) accessible to youth
   ☐ Locking device or supervision required
   ☐ Other change(s) *(Please describe.)* _____

   d. **Have there been any changes in State law that impact the following?**

   Licensing of tobacco vendors ☐ **Yes** ☒ **No**
   Penalties for sales to minors ☐ **Yes** ☒ **No**

2. **Describe how the Annual Synar Report** *(see 45 C.F.R. 96.130(e))* **and the State Plan** *(see 42 U.S.C. 300x-51)* **were made public within the State prior to submission of the ASR.** *(Check all that apply.)*

   ☐ Placed on file for public review
   ☒ Posted on a State agency Web site *(Please provide exact Web address.)*
   www.ncdhhs.gov/mhddsas/statspublications/reports/index.htm

☐ Notice published in a newspaper or newsletter
☐ Public hearing
☐ Announced in a news release, a press conference, or discussed in a media interview
☐ Distributed for review as part of the SAPT Block Grant application process
☐ Distributed through the public library system
☐ Published in an annual register
☐ Other change(s) *(Please describe.)* _____

3. **Identify the following agency or agencies** *(see 42 U.S.C. 300x-26 and 45 C.F.R. 96.130).*

   a. **The State agency(ies)** ***designated by the Governor for oversight of the Synar requirements:***

   NC Department of Health and Human Services, Division of Mental Health, Developmental Disabilities and Substance Abuse Services

   Has this changed since last year's Annual Synar Report? ☐ **Yes** ☒ **No**

   b. **The State agency(ies)** ***responsible for conducting random, unannounced Synar inspections:***

   NC Department of Health and Human Services, Division of Mental Health, Developmental Disabilities and Substance Abuse Services

   Has this changed since last year's Annual Synar Report? ☐ **Yes** ☒ **No**

   c. **The State agency(ies)** ***responsible for enforcing youth tobacco access law(s):***

   NC Department of Crime Control and Public Safety, Division of Alcohol Law Enforcement

   Has this changed since last year's Annual Synar Report? ☐ **Yes** ☒ **No**

4. **Identify the State agency(ies) responsible for tobacco prevention activities.**

   NC Department of Health and Human Services, Division of Public Health, Tobacco Prevention and Control Branch

   Has the responsible agency changed since last year's Annual Synar Report?

   ☐ **Yes** ☒ **No**

   a. **Describe the coordination and collaboration that occur between the agency responsible for tobacco prevention and the agency responsible for oversight of the Synar requirements.** *(Check all that apply.)* **The two agencies**

   ☐ Are the same
   ☐ Have a formal written memorandum of agreement
   ☒ Have an informal partnership
   ☒ Conduct joint planning activities
   ☐ Combine resources
   ☒ Have other collaborative arrangement(s) *(Please describe.)* *Collaborate on*

training and technical assistance activities, policy strategies and workgroups

5. **Please answer the following questions regarding the State's activities to enforce the youth access to tobacco law(s) in FFY 2008** *(see 42 U.S.C. 300x-26 and 45 C.F.R. 96.130(e)).*

   a. **Which one of the following describes the enforcement of youth access to tobacco laws carried out in your State?** *(Check one category only.)*

   ☐ Enforcement is conducted exclusively by local law enforcement agencies.
   ☐ Enforcement is conducted exclusively by State agency(ies).
   ☒ Enforcement is conducted by both local and State agencies.

   b. **The following items concern penalties imposed for violations of youth access to tobacco laws by LOCAL AND/OR STATE LAW ENFORCEMENT AGENCIES. Please fill in the number requested. If State law does not provide for tobacco retailer license/permit suspension or revocation, please mark "NA." (Note: Data is from calendar year 2007)**

[illegible]	[illegible]	[illegible]	TOTAL
Number of citations issued	NA	1,194	1,194
Number of fines assessed	NA	Not Available	
Number of permits/licenses suspended	NA		
Number of permits/licenses revoked	NA		
Other *(Please describe.)* Number of convictions	NA	659	659

   c. **What additional activities are conducted in your State to support enforcement and compliance with State tobacco access law(s)?** *(Check all that apply.)*

   ☒ Merchant education and/or training
   ☒ Incentives for merchants who are in compliance (e.g., reward and reminder)
   ☒ Community education regarding youth access laws
   ☒ Media use to publicize compliance inspection results
   ☒ Community mobilization to increase support for retailer compliance with youth access laws
   ☐ Other activities *(Please list.)* _____

   Briefly describe all checked activities:

All activities described were conducted during the period from October 1, 2007 – September 30, 2008

1. Merchant Education – Alcohol Law Enforcement (ALE) agents conducted 338 Be a Responsible Seller/Server (BARS) programs to educate retailers and their employees on laws and penalties for selling tobacco and alcohol to minors.

2. Incentives for Merchants – ALE agents distributed 2,143 Tobacco Enforcement Excellence (TEE) awards to clerks who did not sell tobacco products to minors during ALE compliance checks.

3. Community Education – The SSA and ALE participated in six workshops to educate adult leaders on youth access issues, environmental approaches and the Red Flag Campaign.

4. Media – Generated 41 media stories on youth access compliance through ALE's Public Information Office.

5. Community Mobilization – The SSA and ALE participated in seven trainings to mobilize youth and their adult leaders to conduct Red Flag Merchant Education and Operation Storefront activities in their local communities.

d. Are citations or warnings issued to retailers or clerks who sell tobacco to minors for inspections that are part of the Synar survey? ☐ **Yes** ☒ **No**

If "Yes" to 5d, please describe the State's procedure for minimizing risk of bias to the survey results:

SYNAR SURVEY METHODS AND RESULTS

The following questions pertain to the survey methodology and results of the Synar survey used by the State to meet the requirements of the Synar Regulation in FFY 2008 (see 42 U.S.C. 300x-26 and 45 C.F.R. 96.130).

6. Has the sampling methodology changed from the previous year? ☒ **Yes** ☐ **No**

The State is required to have an approved up-to-date description of the Synar sampling methodology on file with CSAP. Please submit a copy of your Synar Survey Sampling Methodology (Appendix B). If the sampling methodology changed from the previous reporting year, these changes must be reflected in the methodology submitted.

7. Please answer the following questions regarding the State's annual random, unannounced inspections of tobacco outlets *(see 45 C.F.R. 96.130(d)(2)).*

a. Did the State use the optional Synar Survey Estimation System (SSES) to analyze the Synar survey data? ☒ **Yes** ☐ **No**

*If **Yes**, attach SSES summary tables 1, 2, 3, 4 and 5 along with the ASR submission and go to Question 8. If **No**, continue to Question 7b.*

b. Report the weighted and unweighted Retailer Violation Rate (RVR) estimates, and the standard error.

Unweighted RVR _____

Weighted RVR _____

Standard error (s.e.) of the (weighted) RVR _____

Fill in the blanks to calculate the <u>right limit</u> of the right-sided 95% confidence interval.

	+	(1.645	×	)	=	
RVR Estimate	**plus**	(1.645	**times**	**Standard Error)**	**equals**	**Right Limit**

c. **Fill out Form 1 in Appendix A (Forms).** *(Required regardless of the sample design.)*

d. **How were the (weighted) RVR estimate and its standard error obtained?** *(Check the one that applies.)*

☐ Form 2 (Optional) in Appendix A (Forms) *(Attach completed Form 2.)*

☐ Other *(Please specify. Provide formulae and calculations or attach and explain the program code and output with description of all variable names.)*

e. **If stratification was used, did any strata in the sample contain only one outlet or cluster this year?** ☐ **Yes** ☐ **No** ☐ **No stratification**

*If **Yes**, explain how this situation was dealt with in variance estimation.*

f. **Was a cluster sample design used?** ☐ **Yes** ☐ **No**

*If **Yes,** fill out and attach Form 3 in Appendix A (Forms 1–5), and answer the following question.*

*If **No**, go to Question 7g.*

Were any certainty primary sampling units selected this year? ☐ **Yes** ☐ **No**

*If **Yes**, explain how the certainty clusters were dealt with in variance estimation.*

g. **Report the following outlet sample sizes for the Synar survey.**

	Sample Size
Effective sample size (sample size needed to meet the SAMHSA precision requirement assuming simple random sampling)	
Target sample size (the product of the effective sample size and the design effect)	
Original sample size (inflated sample size of the target sample to counter the sample attrition due to ineligibility and non-completion)	
Eligible sample size (number of outlets found to be eligible in the sample)	
Final sample size (number of eligible outlets in the sample for which an inspection was completed)	

h. **Fill out Form 4 in Appendix A (Forms 1–5).**

8. **Did the State's Synar survey use a list frame?** ☐ **Yes** ☒ **No**

*If **Yes**, answer the following questions about its coverage.*

a. **The calendar year of the latest frame coverage study:** _____

b. **Percent coverage from the latest frame coverage study:** _____

c. **Was a new study conducted in this reporting period?** ☐ **Yes** ☐ **No**

*If **Yes,** please complete Appendix D (List Sampling Frame Coverage Study) and submit it with the Annual Synar Report.*

d. **The calendar year of the next coverage study planned:** _____

9. **Has the Synar survey inspection protocol changed from the previous year?**

☐ **Yes** ☒ **No**

The State is required to have an approved up-to-date description of the Synar inspection protocol on file with CSAP. Please submit a copy of your Synar Survey Inspection Protocol (Appendix C). If the inspection protocol changed from the previous year, these changes must be reflected in the protocol submitted.

a. **Provide the inspection period: From** 03/01/08 **To** 08/08/08
MM/DD/YY MM/DD/YY

b. **Provide the number of youth inspectors used in the current inspection year:**

five

NOTE: If the State uses SSES, please ensure that the number reported in 9b matches that reported in SSES Table 4, or explain any difference.

c. **Fill out and attach Form 5 in Appendix A (Forms 1–5).** *(Not required if the State used the Synar Survey Estimation System (SSES) to analyze the Synar survey data.)*

SECTION II: FFY 2009 (Intended Use):

Public law 42 U.S.C. 300x-26 of the Public Health Service Act and 45 C.F.R. 96.130 (e) (4, 5) require that the States provide information on future plans to ensure compliance with the Synar requirements to reduce youth tobacco access.

1. **In the upcoming year, does the State anticipate any changes in the:**

   Synar sampling methodology ☐ **Yes** ☒ **No**
   Synar inspection protocol ☐ **Yes** ☒ **No**

   If changes are made in either the Synar sampling methodology or the Synar inspection protocol, the State is required to obtain approval from CSAP prior to implementation of the change and file an updated Synar Survey Sampling Methodology (Appendix B) or an updated Synar Survey Inspection Protocol (Appendix C), as appropriate.

2. **Please describe the State's plans to maintain and/or reduce the target rate for Synar inspections to be completed in FFY 2009. Include a brief description of plans for law enforcement efforts to enforce youth tobacco access laws, activities that support law enforcement efforts to enforce youth tobacco access laws, and any anticipated changes in youth tobacco access legislation or regulation in the State.**

   The SSA through a contract with Alcohol Law Enforcement will implement strategies and activities to reduce youth access to tobacco products in NC. With funding from the NC Health and Wellness Trust Fund, the education and enforcement program will focus activities on targeted enforcement operations including 5,000 tobacco compliance checks conducted across the state; media and recognition activities to raise public awareness of youth access issues by generating at least 15 earned media stories; continuing to enhance and build new partnerships by participating in a minimum of nine community mobilization and recognition activities, promoting retailer education and training as well as conducting workshops to educate communities about state efforts and how they can be engaged locally. In the 2007 legislative session, the Child Fatality Task Force, with support from many state agencies, was successful in getting HB 2487 passed. The bill reads "an act to change the format of a driver's license or special identification card being issued to a person less than twenty-one years of age from a horizontal format to a vertical format to make recognition of underage persons more easy for clerks dealing in age-restricted sales of products such as alcoholic beverages and tobacco products as recommended by the child fatality task force." The law became effective October 1, 2008 for new license holders under the age of 21. The vertical format will still have the color codes (red, yellow, green) found currently on the horizontal license format which we think will strengthen our efforts with the Red Flag Campaign. Part of our focus for the upcoming year is to increase awareness of the new format among retailers, local coalitions and youth organizations involved in merchant education. This will be critical for retailers to understand as they will now have to deal with two underage license formats at least until the current horizontal licenses (held by youth who received their licenses prior to October 1, 2008) are phased out.

3. **Describe any challenges the State faces in complying with the Synar regulation.** *(Check all that apply.)*

   ☒ Limited resources for law enforcement of youth access laws

- ☒ Limited resources for activities to support enforcement and compliance with youth tobacco access laws
- ☒ Limitations in the State youth tobacco access laws
- ☐ Limited public support for enforcement of youth tobacco access laws
- ☒ Limitations on completeness/accuracy of list of tobacco outlets
- ☐ Limited expertise in survey methodology
- ☐ Laws/regulations limiting the use of minors in tobacco inspections
- ☒ Difficulties recruiting youth inspectors
- ☐ Geographic, demographic, and logistical considerations in conducting inspections
- ☒ Cultural factors (e.g., language barriers, young people purchasing for their elders)
- ☐ Issues regarding sources of tobacco under tribal jurisdiction
- ☐ Other challenges *(Please list.)*_____

Briefly describe all checked challenges and propose a plan for each, or indicate the State's need for TA related to each relevant challenge.

The SSA continues to be concerned about the state's ability to maintain active enforcement of N.C.G.S. 14-313. The NC Health and Wellness Trust Fund Commission have provided funding for education and enforcement activities since 2002. As the funding becomes reduced and even more competitive, the SSA will have to find stable funding for enforcement. The SSA is continuing to assess youth access related policy options that may be pursued in NC. The legislative agenda of advocate organizations typically include tobacco control, although most pressing efforts focus on the clean indoor air issues for the upcoming year and possibly the excise tax. The state does not have licensing, so it has been difficult to track the number of retail outlets that sell tobacco products. This is a policy option that we have discussed with partner agencies and are looking at how this system might work in NC.

Difficulties in recruiting youth are mostly related to competing activities such as sports and other extra-curricular activities, camps, etc. The survey team leader generally recruits several youth during the year in case these situations arise, the youth move or age out of the program.

Cultural barriers do exist particularly related to language. The SSA in partnership with ALE, El Pueblo and other stakeholders have partnered together to get merchant education materials in Spanish language. We will also explore other ways, such as training, in which we could work more effectively with Latino retailers.

APPENDIX A: SSES TABLES

TABLE 1 – Synar Survey Estimates and Sample Sizes

TABLE 2 – Synar Survey Results by Stratum and by OTC/VM

TABLE 3 – Synar Survey Sample Tally Summary

TABLE 4 – Synar Survey Inspection Results by Youth Inspector Characteristics

SSES Table 1 (Synar Survey Estimates and Sample Sizes)

CSAP-SYNAR REPORT

State	NC
Federal Fiscal Year (FFY)	2009
Date	9/24/2008 18:03
Data	NCSSESinput08-09.xls
Analysis Option	Stratified Clustered with FPC

Estimates

Unweighted Retailer Violation Rate	18.9%
Weighted Retailer Violation Rate	17.4%
Standard Error	2.0%
Is SAMHSA Precision Requirement met?	NO
Right-sided 95% Confidence Interval	[0.0%, 20.6%]
Two-sided 95% Confidence Interval	[13.4%, 21.3%]
Design Effect	2.0
Accuracy Rate (unweighted)	93.9%
Accuracy Rate (weighted)	94.9%
Completion Rate (unweighted)	97.3%

Sample Size for Current Year

Effective Sample Size	265
Target (Minimum) Sample Size	940
Original Sample Size	960
Eligible Sample Size	901
Final Sample Size	877
Overall Sampling Rate	7.1%

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

STATE: NC
FFY: 2009

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											
11	11	0	923	22	3	76	71	70	22	31.3%	
12	12	0	1,087	8	2	48	48	45	6	10.7%	
13	13	0	1,286	4	2	47	47	46	8	18.9%	
14	14	0	766	56	4	81	77	76	14	18.5%	
21	21	0	1,266	23	3	68	63	57	6	9.6%	
22	22	0	1,312	8	2	122	111	109	16	14.5%	
31	31	0	1,696	11	2	77	72	70	3	3.9%	
32	32	0	792	4	2	92	84	82	17	18.7%	
33	33	0	435	47	3	46	44	44	11	22.4%	
41	41	0	1,059	11	2	91	83	80	19	30.1%	
42	42	0	934	4	2	103	100	99	29	32.3%	
43	43	0	945	39	7	109	101	99	15	14.5%	
Total		0	12,501	237	34	960	901	877	166	17.4%	2.0%
Over the Counter Outlets											
11	11	0	923	22	3	70	70	70	22	31.3%	
12	12	0	1,087	8	2	45	45	45	6	10.7%	
13	13	0	1,286	4	2	46	46	46	8	18.9%	
14	14	0	766	56	4	76	76	76	14	18.5%	
21	21	0	1,266	23	3	57	57	57	6	9.6%	
22	22	0	1,312	8	2	109	109	109	16	14.5%	
31	31	0	1,696	11	2	70	70	70	3	3.9%	
32	32	0	792	4	2	82	82	82	17	18.7%	
33	33	0	424	47	3	43	43	43	11	23.0%	
41	41	0	1,053	11	2	79	79	79	19	30.3%	
42	42	0	927	4	2	98	98	98	28	31.8%	
43	43	0	945	39	7	100	100	99	15	14.5%	
Total		0	12,477	237	34	875	875	874	165	17.3%	2.0%
Vending Machines											
11	11	0	0	22	3	0	0	0	0	0.0%	
12	12	0	0	8	2	0	0	0	0	0.0%	
13	13	0	0	4	2	0	0	0	0	0.0%	
14	14	0	0	56	4	0	0	0	0	0.0%	
21	21	0	0	23	3	0	0	0	0	0.0%	
22	22	0	0	8	2	0	0	0	0	0.0%	
31	31	0	0	11	2	0	0	0	0	0.0%	
32	32	0	0	4	2	0	0	0	0	0.0%	
33	33	0	11	47	3	1	1	1	0	0.0%	
41	41	0	0	11	2	0	0	0	0	0.0%	
42	42	0	7	4	2	1	1	1	1	100.0%	
43	43	0	0	39	7	0	0	0	0	0.0%	
Total		0	18	237	34	2	2	2	1	38.1%	32.0%

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

SSES Table 3 (Synar Survey Sample Tally Summary)

STATE: NC
FFY: 2009

Disposition Code	Description	Count	Subtotal
EC	Eligible and inspection complete outlet	877	
Total (Eligible Completes)			877
N1	In operation but closed at time of visit	24	
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	0	
N7	Tobacco out of stock	0	
N8	Run out of time	0	
N9	Other noncompletion	0	
Total (Eligible Noncompletes)			24
I1	Out of Business	5	
I2	Does not sell tobacco products	53	
I3	Inaccessible by youth	1	
I4	Private club or private residence	0	
I5	Temporary closure	0	
I6	Unlocatable	0	
I7	Wholesale only/Carton sale only	0	
I8	Vending machine broken	0	
I9	Duplicate	0	
I10	Other ineligibility	0	
Total (Ineligibles)			59
Grand Total			960

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

STATE: NC
FFY: 2009

Frequency Distribution

Gender	Age	Number of Inspectors	Attempted Buys	Successful Buys
Male	14	0	0	0
	15	1	114	28
	16	2	329	58
	17	0	0	0
	18	0	0	0
	Subtotal	3	443	86
Female	14	0	0	0
	15	0	0	0
	16	2	434	80
	17	0	0	0
	18	0	0	0
	Subtotal	2	434	80
Other		0	0	0
Grand Total		5	877	166

Buy Rate in Percent by Age and Gender

Age	Male	Female	Total
14	0.0%	0.0%	0.0%
15	24.6%	0.0%	24.6%
16	17.6%	18.4%	18.1%
17	0.0%	0.0%	0.0%
18	0.0%	0.0%	0.0%
Other			0.0%
Total	19.4%	18.4%	18.9%

APPENDICES B & C: FORMS

Instructions

Appendix B (Sampling Design) and Appendix C (Inspection Protocol) are to reflect the State's CSAP-approved sampling design and inspection protocol. These appendices, therefore, should generally describe the design and protocol and are not to be modified with year-specific information. Please note that any changes to either appendix must receive CSAP's advance written approval. To facilitate the State's completion of this section, simply "cut and paste" the previously approved sampling design (Appendix B) and inspection protocol (Appendix C).

APPENDIX B: SYNAR SURVEY SAMPLING METHODOLOGY

State: NC
FFY: 2009

1. **What type of sampling frame is used?**

   ☐ List frame *(Go to Question 2.)*
   ☒ Area frame *(Go to Question 3.)*
   ☐ List-assisted area frame *(Go to Question 2.)*

2. **List all sources of the list frame. Indicate the type of source from the list below. Provide a brief description of the frame source. Explain how the lists are updated (method), including how new outlets are identified and added to the frame. In addition, explain how often the lists are updated (cycle).** *(After completing this question, go to Question 4.)*

   Use the corresponding number to indicate **Type of Source** ***in the table below.***

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

Name of Frame Source	Type of Source	Description	Updating Method and Cycle

3. If an area frame is used, describe how area sampling units are defined and formed.

Multi-stage design: A multi-stage design was used to facilitate the development of the sampling frame and to reduce field cost. Since no comprehensive listing of outlets is available, an area sampling frame is used. Two stages were used in the design. The sampling and data collection methods are basically unchanged from the previous survey except sample areas are canvassed in the field as the source of sample outlets rather than the D&B list of businesses as used in past Synar surveys.

Stage 1: In this stage, the State's 100 counties singly or in pairs comprised the primary sampling units (PSUs); minimum PSU size is 10 potential outlets. This combination resulted in a total of 96 PSUs. These PSUs were stratified into 4 primary strata based on mental health districts and into secondary strata within each of those 4 strata, based on estimated number of outlets. This resulted in a total of 12 explicit final strata. Within these strata, PSUs were sorted by size to achieve additional stratification. PSUs were selected from each of these strata using probability proportional to size (field costs and estimated number of outlets). Three of the PSUs were selected with certainty and used as certainty strata. In the certainty strata, the ZIP code areas become the PSUs.

Stage 2: Within the sample PSUs of the non-certainty strata, second stage units (SSUs) are postal ZIP areas. The SSUs are selected from the sample PSUs with probability proportional to size and one subarea (anticipated to have approximately 10 to 12 outlets) is selected in each sample SSU to obtain nearly equal sampling weights. All ZIP areas that are 50 percent or more within the sample county (based on population) have a nonzero probability of being selected. ZIPs with no potential outlets according to D&B are assigned a size measure of 1. Certainty ZIP areas are given a chance of receiving more than one canvass area (consistent with expected number of hits). All random numbers were generated within Excel spreadsheet using the random number function (RAND).

a. **Is any area left out in the formation of the area frame?** ☐ **Yes** ☒ **No**

*If **Yes**, what percentage of the State's population is not covered by the area frame?* _____%

4. **Federal regulation requires that vending machines be inspected as part of the Synar survey. Are vending machines included in the Synar survey?** ☒ **Yes** ☐ **No**

*If **No**, please indicate the reason they are not included in the Synar survey.*

☐ State law bans vending machines

☐ State law bans vending machines from locations accessible to youth

☐ State has SAMHSA approval to exempt vending machines from the survey

☐ Other *(Please describe.)* _____

5. **Which category below best describes the sample design?** *(Check only one.)*

☐ **Census** *(STOP HERE: Appendix B is complete.)*

Unstratified State-wide sample:

☐ Simple random sample *(Go to Question 9.)*

☐ Systematic random sample *(Go to Question 6.)*

☐ Single-stage cluster sample *(Go to Question 8.)*

☐ Multi-stage cluster sample *(Go to Question 8.)*

Stratified sample:

☐ Simple random sample *(Go to Question 7.)*

☐ Systematic random sample *(Go to Question 6.)*

☐ Single-stage cluster sample *(Go to Question 7.)*

☒ Multi-stage cluster sample *(Go to Question 7.)*

☐ **Other** *(Please describe and go to Question 9.)* _____

6. **Describe the systematic sampling methods.** *(After completing Question 6, go to Question 7 if stratification is used. Otherwise go to Question 9.)*

7. **Provide the following information about stratification.**

   a. **Provide a full description of the strata that are created.**

The PSUs were stratified into 4 primary strata based on mental health districts and into secondary strata within each of those 4 strata, based on estimated number of outlets. This resulted in a total of 12 explicit final strata. Within these strata, PSUs were sorted by size to achieve additional stratification. PSUs were selected from each of these strata using probability proportional to size (a function of field costs and estimated number of outlets).

   b. **Is clustering used within the stratified sample?**

   ☒ **Yes** *(Go to Question 8.)*

   ☐ **No** *(Go to Question 9.)*

8. **Provide the following information about clustering.**

   a. **Provide a full description of how clusters are formed.** *(If multi-stage clusters are used, give definitions of clusters at each stage.)*

Stage 1: In this stage, the State's 100 counties singly or in pairs comprise the primary sampling units (PSUs); minimum PSU size is 10 potential outlets. This combination results in a total of 98 PSUs, counting the certainty PSUs as one each. Within the strata described above, PSUs were sorted by size to achieve additional stratification. PSUs were selected from each of these strata using probability proportional to size (field costs and estimated number of outlets).

Stage 2: Within the sample PSUs, second stage units (SSUs) are ZIP areas. The SSUs are selected from the sample PSUs with probability proportional to size and one subarea (anticipated to have approximately 10 to 12 outlets) is selected in each sample SSU to obtain nearly equal sampling weights. All ZIP areas that are 50 percent or more within the sample county (based on population) have a nonzero probability of being selected if that county is selected. ZIPs with no potential outlets according to D&B are assigned a size measure of 1. Certainty ZIP areas are given a chance of receiving more than one canvass area (consistent with expected number of hits).

   b. **Specify the sampling method (simple random, systematic, or probability proportional to size sampling) for each stage of sampling and describe how the method(s) is (are) implemented.**

Stage 1:. PSUs were selected from each of these strata using probability proportional to size (field costs and estimated number of outlets).

Stage 2: Within the sample PSUs, second stage units (SSUs) are selected from the sample PSUs with probability proportional to size. If an SSU contains substantially more than the targeted canvass area of 10 or 12, the SSU is sub-segmented into canvass areas on the map and equal probability is used to select a canvass area. All random numbers are generated within Excel spreadsheet using the random number function (RAND).

9. Provide the formulae for determining the effective, target, and original outlet sample sizes.

Since we are proposing the same stratification and cluster size as used in the current design, we use the previous year's results to estimate a sample size for the proposed redesign. Specifically, the parameters being used are:

1) The estimated population size is 11,570, which is calculated from the 7,405 outlets estimated in 2007, adjusted upward by dividing by 0.64 to account for the estimated under-coverage from the 2007 coverage study.
2) The design effect of 1.6, increased from the 1.2 experienced in the 2007 Synar compliance survey to allow for a possible increase in unequal weighting and yearly fluctuation in the estimated design effect.
3) The compliance rate (RVR) of 12 percent is based on the 11.5 percent of the 2007 survey.
4) The effective sample size, n_e, according to equation S3.4 of the 2003 Synar Guidance Document equals 309.
5) Using Equation S3.6 to account for design effects due largely to clustering and unequal weighting, we obtain the target number of inspections of 495.
6) Using the completion rate for outlets in 2007 of 94 percent we obtain the original sample size of outlets needed, 527.
7) And finally, approximately a 12 percent increase is made to the 527 to allow for possible error in assumed parameters; giving a final sample size, n_o, of 600, which is to be targeted in the canvass areas (600 sample tobacco outlets).

Note that the 2007 targeted 940 sample outlets had been needed in the past when the RVR was much larger (larger variance) and the design effect due to unequal weighting and extreme RVRs in some areas had an influence on the sampling error that no longer seems the case. As part of the redesign we suggest it is also time to revisit the sample size.

A slightly larger number of sample areas are initially selected than believed necessary to achieve the required sample of outlets, and a small random sample of those are designated as back-up or supplemental areas. These areas are fielded as needed, in randomly specified order. The overall original sample size is the sum of n_o and the number of outlets in the supplemental samples (n_s) that are fielded. This process is referred to by some as fielding randomly ordered waves used to supplement the basic sample where eligibility or response rates are lower than anticipated. When sorting a list of names or areas according to random numbers, any arbitrary range of these names or areas identifies a valid probability sample from the frame. If the waves or supplemental areas are implemented in random order, and if the entire wave or supplemental area is fielded once activated, the combination of the basic sample plus implemented supplement areas comprise a valid probability sample.

APPENDIX C: SYNAR SURVEY INSPECTION PROTOCOL

State: NC
FFY: 2009

Note: Attach a copy of the inspection form and protocol used to record the inspection result.

1. **How does the State Synar survey protocol address the following?**

   a. **Consummated buy attempts?**

   ☒ Required ☐ Not Permitted
   ☐ Permitted under specified circumstances ☐ Not specified in protocol

   b. **Youth inspectors to carry ID?**

   ☒ Required ☐ Not Permitted
   ☐ Permitted under specified circumstances ☐ Not specified in protocol

   c. **Adult inspectors to enter the outlet?**

   ☐ Required ☐ Not Permitted
   ☒ Permitted under specified circumstances ☐ Not specified in protocol

   d. **Youth inspectors to be compensated?**

   ☒ Required ☐ Not Permitted
   ☐ Permitted under specified circumstances ☐ Not specified in protocol

2. **Identify the agency(ies) or entity(ies) that actually conduct the random, unannounced Synar inspections of tobacco outlets.** *(Check all that apply.)*

   ☐ Law enforcement agency(ies)
   ☐ State or local government agency(ies) other than law enforcement
   ☒ Private contractor(s)
   ☐ Other

   List the agency name(s): **American Lung Association**

3. **Are Synar inspections combined with law enforcement efforts (i.e., do law enforcement issue warnings or citations to retailers found in violation of the law at the time of the inspection)?**

   ☐ Always ☐ Usually ☐ Sometimes ☐ Rarely ☒ Never

4. **Describe the methods used to recruit, select, and train youth inspectors and adult supervisors.**

In order to assure inter-rater reliability, the same instructor trains the youth. The instructions include specific information on the role and responsibilities of the youth, followed by role-play exercises covering various scenarios that prepared the youth for the types of questions or responses to expect from merchants and their employees.

5. **Are there specific legal or procedural requirements instituted by the State to address the issue of youth inspectors' immunity when conducting inspections?**

   a. **Legal** ☒ **Yes** ☐ **No** *(If **Yes,** please describe.)*

   N.C.G.S. 14-313 makes it illegal for a person less than 18 years of age to purchase, acquire or receive tobacco products or cigarette wrapping papers. The two exceptions are if the minor is enlisted by a police or sheriff's department to test compliance OR if the minor is working with the Department of Health and Human Services to conduct annual, random, unannounced inspections. In both situations, prior parental consent is required.

   b. **Procedural** ☐ **Yes** ☒ **No** *(If **Yes,** please describe.)*

6. **Are there specific legal or procedural requirements instituted by the State to address the issue of the safety of youth inspectors during all aspects of the Synar inspection process?**

   a. **Legal** ☐ **Yes** ☒ **No** *(If **Yes,** please describe.)*

   b. **Procedural** ☒ **Yes** ☐ **No** *(If **Yes,** please describe.)*

   Two adult supervisors must be the same gender of each youth inspector for all overnight Synar Survey inspection trips. Bars, lounges and taverns are not inspected because of safety concerns even though they may be accessible to youth.

7. **Are there any other legal or procedural requirements the State has regarding how inspections are to be conducted (e.g., age of youth inspector, time of inspections, training that must occur)?**

   a. **Legal** ☐ **Yes** ☒ **No** *(If **Yes,** please describe.)*

   b. **Procedural** ☒ **Yes** ☐ **No** *(If **Yes,** please describe.)*

   Youth inspectors must be 15-16 years old. Liquor stores are not included due to the fact that they are all state operated and do not sell tobacco products.

NORTH CAROLINA'S COMPLIANCE CHECK/ INSPECTION PROTOCOL

A team of two to four youth between the ages of 15 and 16 years, who appear to be approximately that age, will participate in our annual compliance checks. Sixteen has been chosen since the most typical age of youths now used in tobacco covert compliance checks when done for enforcement purposes is 16 to 17 years old. Fifteen is added to give a broader range of outcome date. The age of appearance will be determined by having 15 adults guess the ages of the youth and calculate an average age of appearance. All youth must appear to be under eighteen in order to participate. An attempt will be made to have teams that are gender and ethnically appropriate to the sample area. More than one set of teams may be selected to work in a particular area of the State. In order to assure inter-rater reliability, the teams will be trained by the same instructors.

Written parental permission will be obtained prior to participation for each minor being used in the study. A photograph of each individual will be obtained prior to program initiation, along with a copy of the youth's birth certificate and a copy of their photo identification card. These will be placed on file with the Community Policy Management Section in the Division of Mental Health, Developmental Disabilities and Substance Abuse Services.

The team will be supervised by an adult over the age of 21 at all times. The youth will be instructed not to misrepresent their age. They will be dressed in the same manner in which they were dressed when they went through the age estimation procedure to assure that no one could say that they looked younger or older than their stated age.

The youth will **not** present any false identification when attempting to purchase tobacco. When asked, they will simply show their true identification. If challenged about their ages, they will state their correct age.

The youths will enter the tobacco establishment alone and attempt to purchase. The supervising adult will remain in the vehicle, or if entering, will enter at a different time so that the merchant will not think they are together. The supervisor will be careful not to let the retailer see the two of them together so that the clerk will not think that the adult is a parent or part of a team conducting tobacco stings.

The youth will carry the money needed to pay for cigarettes and will first try to purchase from a self-service display if that is available. If this is unavailable, a single pack of cigarettes will be requested. Youth attempting to purchase cigarettes from vending machines will be instructed to go directly to the machine and deposit the correct change. After the purchase attempt, the youth will exit the establishment with or without the tobacco product. If a pack of cigarettes was purchased, an identification sticker will be placed on the product and reported on the data collection form. All tobacco products will be destroyed by the State at the end of the study.

No youth at any time will stay overnight with an adult supervisor of the opposite sex. No youth will stay overnight without the signed approval of the parent(s) of the youth.. Any team member may quit the study at any time and be immediately driven home. The youth will receive full pay up to the time of terminating his/her participation.

The supervisor will complete a N.C. Tobacco Retail Outlet Compliance Check Data Collection Form (see attached) immediately following each attempted inspection. The data collection form was designed to include a variety of key data elements which will provide valuable information in terms of assessing compliance with the Synar Amendment and targeting vendor education and enforcement efforts.

NORTH CAROLINA TOBACCO RETAIL OUTLET
COMPLIANCE CHECK DATA COLLECTION FORM

1. Name of Outlet:_____

2. Address of Outlet:_____

   City:_____ Zip: _____

3. Date of Compliance Check: _____, 1996 Time: _____AM/PM

4. Status of Outlet: _____

   1= No longer in business
   2= Closed at time of check
   3= Not at address given
   4= Judged unsafe for minor
   5= Does not sell tobacco
   6= Check was completed

5. Type of Outlet:_____

   1= Gas/Convenience
   2= Convenience without gas
   3= Grocery Store
   4= Drug Store/Pharmacy
   5=Dept. Store
   6=Gas Only
   7=Restaurant
   8=Hotel/Motel
   9=Bowling Alley
   10=Skating Rinks
   11=Video Arcades
   12=Other

6. Location of Tobacco Products in Retail Outlet:_____

   1= Behind Counter (had to ask clerk to get tobacco)
   2= In Front of Counter (picked up tobacco without asking)
   3= Vending Machine, out of sight of employee
   4= Vending Machine, in sight of employee

7. Was Vendor Willing to Sell to Minor? _____yes _____no

8. Did you observe single cigarettes for sale? _____yes _____no

9. Was Warning Sign Posted (e.g. No Sale Under 18) _____yes _____no

10. Was Minor Asked Age? _____yes _____no

11. Was Minor Asked for I.D.? _____yes _____no

12. Approximate Age of Clerk: _____Race: _____ Sex: _____male _____female
    Age -- 1= Under 18 years 2= 18-40 years 3= Over 40 years
    Race-- 1=Black 2=White 3=Other

13. Cost of Tobacco Product: $_____ Sticker Number:_____

14. Initials of Minor Making the Buy: _____

15. Other Comments (please record any interesting or unusual details) _____
_____
_____

Data Form Number: _____ Supervisor: _____

Tob.Comp.Form I/96

APPENDIX D: LIST SAMPLING FRAME COVERAGE STUDY

(LIST FRAME ONLY)

State: NC
FFY: 2009

(Appendix D: Not Applicable to NC)

1. **Calendar year of the coverage study: _____**

2. **Percent coverage found: _____%**
   (Provide calculation of the percent coverage.)

3. **Provide a description of the coverage study methods and results.**