

ANNUAL SYNAR REPORT

42 U.S.C. 300x-26

OMB № 0930-0222

FFY 2016

State: TN

SECTION I: FFY 2015 (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. If any changes were made to the state law(s) since the last reporting year, please attach a photocopy of the law to the hard copy of the ASR and also upload a copy of the state law to WebBGAS. (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 state law that impact the following?

Licensing of tobacco vendors Yes No

Penalties for sales to minors Yes No

Vending machines 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 and the date when the FFY 2016 ASR was posted to this Web address.)*

http://www.tn.gov/behavioral-health. Posted on December 14, 2015.

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 SABG application process

Distributed through the public library system

Published in an annual register

Other (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:**

The Department of Mental Health and Substance Abuse Services (DMHSAS) is responsible for the SAPT Block Grant requirements which include Synar. The Department of Agriculture is mandated to enforce youth access laws. DMHSAS has a contractual agreement with the Department of Agriculture to conduct the Synar Survey.

Has this changed since last year's Annual Synar Report?

Yes No

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

Tennessee Department of Agriculture

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):**

Tennessee Department of Agriculture

Has this changed since last year's Annual Synar Report?

Yes No

4. Identify the following agencies and describe their relationship with the agency responsible for the oversight of the Synar requirements.

- a. Identify the state agency responsible for tobacco prevention activities (the agency that receives the Centers for Disease Control and Prevention's National Tobacco Control Program funding).**

Tennessee Department of Health

- b. Has the responsible agency changed since last year's Annual Synar Report?**

Yes No

- c. 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.)*

DMHSAS works with the Tennessee Department of Health (TDH) on youth prevention activities. TDH has included the reduction of the Synar rate as a goal for their tobacco prevention efforts; and the tobacco coordinators around the state have worked to distribute merchant education toolkits. In addition, at the community level, DMHSAS funded coalitions assist TDH's Health Councils to plan and implement tobacco prevention activities that are based on a public health model.

- d. Identify the state agency responsible for enforcing the youth access and advertising restrictions in the Family Smoking Prevention and Tobacco Control Act (the agency that is under contract to the Food and Drug Administration's Center for Tobacco Products (FDA/CTP)).**

Tennessee Department of Agriculture

- e. Has the responsible agency changed since last year's Annual Synar Report?**

Yes No

- f. Describe the coordination and collaboration that occur between the agency contracted with the FDA to enforce federal youth tobacco access laws 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.)* The Department of Mental Health and Substance Abuse Services is responsible for SAPT Block Grant requirements which include Synar. The Department of Agriculture is mandated to enforce youth access laws. DMHSAS has a contractual agreement with the Department of Agriculture to conduct the Synar survey.

The Department of Agriculture contracts with FDA to enforce federal youth access laws. During tobacco compliance inspections involving youth, the tobacco laws are enforced on a state and federal level. The outcome is shared with both agencies.

- g. Does the state use data from the FDA enforcement inspections for Synar survey reporting?**

Yes No

5. Please answer the following questions regarding the state's activities to enforce the state's youth access to tobacco law(s) in FFY 2015 (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 state 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 all violations of state youth access to tobacco laws by **LOCAL AND/OR STATE LAW ENFORCEMENT AGENCIES** (this does not include enforcement of federal youth tobacco access laws). Please fill in the number requested. If state law does not allow for an item, please mark "NA" (not applicable). If a response for an item is unknown, please mark "UNK." The chart must be filled in completely.

PENALTY	OWNERS	CLERKS	TOTAL
Number of <u>citations issued</u>	753	7	760
Number of <u>finest assessed</u>	267	0	267
Number of <u>permits/licenses suspended</u>	0		0
Number of <u>permits/licenses revoked</u>	0		0
Other (Please describe.)			

c. Which one of the following best describes the level of enforcement of state youth access to tobacco laws carried out in your state? (Check one category only.)

- Enforcement is conducted only at those outlets randomly selected for the Synar survey.
- Enforcement is conducted only at a subset of outlets not randomly selected for the Synar survey.
- Enforcement is conducted at a combination of outlets randomly selected for the Synar survey and outlets not randomly selected for the Synar survey.

d. Did every tobacco outlet in the state receive at least one compliance check that included enforcement of the state youth tobacco access law(s) in the last year?

- Yes No

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

- Merchant education and/or training
- Incentives for merchants who are in compliance (e.g., nonenforcement compliance checks in which compliant retailers are given positive reinforcement and noncompliant retailers are warned about youth access laws)

- 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.*) Food & Dairy Inspections, Toll-free complaint line

Briefly describe all checked activities:

Merchant Education and/or Training:

DMHSAS developed the “Tennessee Retailer Education Guide.” The Guide is available on the DMHSAS’ website and has been distributed to merchants through the Department of Agriculture, local community coalitions, and the tobacco coordinators at the Department of Health.

Community Education Regarding Youth Access Laws and Community Mobilization to Increase Support for Retailer Compliance with Youth Access Laws:

DMHSAS contracts with 35 community prevention coalitions. Each coalition is required to develop a comprehensive community prevention plan related to youth tobacco prevention. Coalitions have developed strategies that best meet the unique needs in their community based on a thorough assessment. Most coalitions include community education as a strategy in their comprehensive community plans and include community mobilization to increase support for retailer compliance with youth access laws.

Below is a description of some specific strategies that coalitions have engaged in over the past year:

- Allies for Substance Abuse Prevention of Anderson County has helped establish new school policies regarding tobacco. The youth coalition has also scheduled professional communications training to better communicate tobacco regulations.
- Blount County Substance Abuse Prevention Action Team's “Take a Stance” campaign, attended by state and federal representatives and senators; local and state law enforcement, school representatives; and youth, was a great success. Blount County has also distributed “smoke-free playground” signs around the county that are funded by the TN Tobacco Settlement Funds. To date, over 100 signs have been placed at ball fields, daycares, schools and churches.
- Community Anti-Drug Coalition of Jackson/Madison County conducted a media campaign pertaining to tobacco availability in the community. There were approximately 103,093 billboard exposures; 300,000 newspaper readers; 80,000 readers of the Jackson Sun E-Edition; and 50,000 Health Magazine readers. The campaign emphasized the importance of parents talking to their kids about the dangers of tobacco. The coalition also set up a booth at three community events disseminating tobacco information. Approximately 500 youth and parents received pamphlets and fact cards.
- Power of Putnam’s youth coalition has been actively involved in assisting in the development of their recently revised implementation plan. The coalition in Putnam County continues to work closely with public housing to engage residents in smoking cessation classes as well as promoting smoke free homes.

•Schools Together Allowing No Drugs (S.T.A.N.D.) in Scott County conducted a purchase survey to find establishments that are failing to verify age identification to assist in upcoming compliance checks with law enforcement. The coalition has also disseminated information about harmful effects of tobacco and various cessation choices in the community and worked with the juvenile judge to decrease waived fees for tobacco offenses.

•The Sumner County Anti-Drug Coalition has developed a program for students across the county to become ambassadors to the community, strengthening their leadership skills, engaging in community-level organizing, and training in tobacco prevention. The coalition's goal is to have student ambassadors use the knowledge gained in the program to lead other young people in discussions regarding tobacco use and effective prevention methods. The coalition also distributed materials pertaining to tobacco use at various events including the Bold Enough Rodeo and Healthy Baby shower to approximately 5,650 people.

Food & Dairy Inspections:

The Tennessee Department of Agriculture, Division of Consumer and Industry Services, Food & Dairy Section, is responsible for inspecting retail establishments that sell food to ensure compliance with state laws and regulations related to food storage, facility sanitation and safety.

After the inspector confirms the establishment is currently selling tobacco products, he will proceed with the tobacco compliance requirements. The requirements include the posted tobacco sign which must be 93 ½ square inches in size, tobacco products in their original sealed packages, no illegal underage tobacco sales to a youth, and vending machines that are supervised or locked.

At the time of the initial inspection, the inspectors discuss the tobacco laws with the manager/owner. A tobacco sign is given to the store manager and the sign requirements are explained. The sign must be posted at the point of sale and state the following:

STATE LAW STRICTLY PROHIBITS THE SALE OF TOBACCO PRODUCTS OR SMOKING PARAPHERNALIA TO PERSONS UNDER THE AGE OF EIGHTEEN (18) YEARS. PROOF OF AGE MAY BE REQUIRED.

New businesses are required to be inspected and permitted before the establishment opens if they plan to sell perishable goods. Any violations are noted on the inspection sheet and required corrections are reviewed. Any tobacco product for retail sale not in its original sealed package will be removed immediately. If the store continues to have repeat violations, civil penalties will be enforced against the store.

Toll-free Complaint Line:

The Tennessee Department of Agriculture provides a toll-free number (1-800-628-2631) for consumers to report establishments selling tobacco products to underage individuals and/or selling single cigarettes. Upon receiving a complaint, a letter discussing the nature of the complaint will be sent to the retailer. Included with this

letter will be a copy of the Tennessee Prevention of Youth Access to Tobacco Law, a Tobacco Sign and a letter stating the requirements for posting this sign. Also included is a Tennessee Retailer's Education Guide. Subsequently, a request is given to the tobacco inspector to conduct a tobacco compliance check. If the complaint was for selling loose cigarettes, the youth will attempt to purchase a single cigarette.

f. 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 5f, please describe the state's procedure for minimizing risk of bias to the survey results from retailers alerting each other to the presence of the survey teams:

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 2015 (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, and 4 to the hard copy of the ASR and upload a copy of SSES tables 1–5 (in Excel) to WebBGAS. Then go to Question 8. If No, continue to Question 7b.

b. Report the weighted and unweighted Retailer Violation Rate (RVR) estimates, the standard error, accuracy rate (number of eligible outlets divided by the total number of sampled outlets), and completion rate (number of eligible outlets inspected divided by the total number of eligible outlets).

Unweighted RVR _____

Weighted RVR _____

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

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

$$\text{RVR Estimate} + (1.645 \times \text{Standard Error}) = \text{Right Limit}$$

plus (1.645 times Standard Error) equals Right Limit

Accuracy rate _____

Completion rate _____

c. **Fill out Form 1 in Appendix A (Forms 1–5).** (*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 1–5) (*Attach completed Form 2.*)

Other (*Please specify. Provide formulas 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 noncompletion)	
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: 2015

b. Percent coverage from the latest frame coverage study: 93.8

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: 2020

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 07/08/15 to 08/30/15
MM/DD/YY MM/DD/YY

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

18

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.

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b. Fill out and attach Form 5 in Appendix A (Forms 1–5). (Not required if the state used SSES to analyze the Synar survey data.)

SECTION II: FFY 2016 (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:

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 2016. 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.

DMHSAS contracts with 35 community prevention coalitions. Each coalition is required to develop a comprehensive community prevention plan related to youth tobacco prevention. Coalitions have developed strategies that best meet the unique needs in their community based on a thorough assessment. Strategies adopted by coalitions involve law enforcement, retail outlets, and parents to reduce both retail and social access to tobacco products. Implementation of rewards and reminder strategies, health fact information dissemination, media campaigns, and "lock/secure your tobacco" products are just a few examples of community based efforts.

The Tennessee Department of Agriculture (TDA), Division of Consumer and Industry Services, Food & Dairy Section, is committed to reducing the accessibility of tobacco products to minors by continuously educating the store managers of the requirements of the tobacco laws, and ensuring they're implemented. Inspectors will inform retailers of any changes in the laws and will advise merchants to implement these changes. We will continue to ensure tobacco products are sold in their original, sealed packages and verify proper tobacco signage. Civil penalties will be enforced for repeat violators.

Tennessee plans to continue enforcing the Prevention of Youth Access to Tobacco laws by conducting tobacco compliance inspections throughout next year. Establishments that are non-compliant will be inspected more frequently until they are compliant. Retailers will receive an outcome letter with their inspection results. The outcome letters address the youth access to tobacco laws and the civil penalties that may be imposed by the Department of Agriculture for repeat violators. Enforcement strategies that incorporate year round inspections, re-inspections for violators, aggressive assessment of penalties, and merchant education will help deter potential violators. Establishments in violation during the Synar survey are currently being inspected in our tobacco enforcement program. Violators will be held accountable for their actions.

The toll-free telephone number will continue to be available to consumers so they may report establishments selling tobacco to minors and/or selling single cigarettes.

Tennessee does not anticipate any changes in the youth tobacco access legislation or regulations.

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
- Issues regarding the age balance of youth inspectors
- Issues regarding the gender balance of 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 technical assistance related to each relevant challenge.

The Department of Agriculture continues to address the challenges of age and gender balances of the youth inspectors. We are consistently looking to hire additional youth and for new resources for youth availability in our program. At this time, no technical assistance is needed.

APPENDIX A: FORMS 1–5

FORM 1 (Required for all states not using the Synar Survey Estimation System (SSES) to analyze the Synar Survey data)

Complete Form 1 to report sampling frame and sample information and to calculate the unweighted retailer violation rate (RVR) using results from the current year’s Synar survey inspections.

Instructions for Completing Form 1: In the top right-hand corner of the form, provide the state name and reporting federal fiscal year (FFY 2016). Provide the remaining information by stratum if stratification was used. Make copies of the form if additional rows are needed to list all the strata.

Column 1: *If stratification was used:*

1(a) Sequentially number each row.

1(b) Write in the name of each stratum. All strata in the state must be listed.

If no stratification was used:

1(a) Leave blank.

1(b) Write “state” in the first row (indicates that the whole state is a single stratum).

Note for unstratified samples: For Columns 2–5, wherever the instruction refers to “each stratum,” report the specified information for the state as a whole.

Column 2: 2(a) Report the number of over-the-counter (OTC) outlets in the sampling frame in each stratum.

2(b) Report the number of vending machine (VM) outlets in the sampling frame in each stratum.

2(c) Report the combined total of OTC and VM outlets in the sampling frame in each stratum.

Column 3: 3(a) Report the estimated number of eligible OTC outlets in the OTC outlet population in each stratum.

3(b) Report the estimated number of eligible VM outlets in the VM outlet population in each stratum.

3(c) Report the combined total estimated number of eligible OTC and VM outlets in the total outlet population in each stratum.

The estimates for Column 3 can be obtained from the Synar survey sample as the weighted sum of eligible outlets by outlet type.

Column 4: 4(a) Report the number of eligible OTC outlets for which an inspection was completed, for each stratum.

4(b) Report the numbers of eligible VM outlets for which an inspection was completed, for each stratum.

4(c) Report the combined total of eligible OTC and VM outlets for which an inspection was completed, for each stratum.

Column 5: 5(a) Report the number of OTC outlets found in violation of the law as a result of completed inspections, for each stratum.

5(b) Report the number of VM outlets found in violation of the law as a result of completed inspections, for each stratum.

5(c) Report the combined total of OTC and VM outlets found in violation of the law as a result of completed inspections, for each stratum.

Totals: For each subcolumn (a–c) in Columns 2–5, provide totals for the state as a whole in the last row of the table. These numbers will be the sum of the numbers in each row for the respective column.

FORM 2 (Optional)

Appropriate for stratified simple or systematic random sampling designs.

Complete Form 2 to calculate the weighted RVR. This table (in Excel form) is designed to calculate the weighted RVR for stratified simple or systematic random sampling designs, accounting for ineligible outlets and noncomplete inspections encountered during the annual Synar survey.

Instructions for Completing Form 2: In the top right-hand corner of the form, provide the state name and reporting federal fiscal year (FFY 2016).

- Column 1: Write in the name of each stratum into which the sample was divided. These should match the strata reported in Column 1(b) of Form 1.
- Column 2: Report the number of outlets in the sampling frame in each stratum. These numbers should match the numbers reported for the respective strata in Column 2(c) of Form 1.
- Column 3: Report the original sample size (the number of outlets originally selected, *including* substitutes or replacements) for each stratum.
- Column 4: Report the number of sample outlets in each stratum that were found to be eligible during the inspections. Note that this number must be less than or equal to the number reported in Column 3 for the respective strata.
- Column 5: Report the number of eligible outlets in each stratum for which an inspection was completed. Note that this number must be less than or equal to the number reported in Column 4. These numbers should match the numbers reported in Column 4(c) of Form 1 for the respective strata.
- Column 6: Report the number of eligible outlets inspected in each stratum that were found in violation. These numbers should match the numbers reported in Column 5(c) of Form 1 for the stratum.
- Column 7: Form 2 (in Excel form) will automatically calculate the stratum RVR for each stratum in this column. This is calculated by dividing the number of inspected eligible outlets found in violation (Column 6) by the number of inspected eligible outlets (Column 5). The state unweighted RVR will be shown in the Total row of Column 7.
- Column 8: Form 2 (in Excel form) will automatically calculate the estimated number of eligible outlets in the population for each stratum. This calculation is made by multiplying the number of outlets in the sampling frame (Column 2) times the number of eligible outlets (Column 4) divided by the original sample size (Column 3). Note that these numbers will be less than or equal to the numbers in Column 2.
- Column 9: Form 2 (in Excel form) will automatically calculate the relative stratum weight by dividing the estimated number of eligible outlets in the population for each stratum in Column 8 by the Total of the values in Column 8.
- Column 10: Form 2 (in Excel form) will automatically calculate each stratum's contribution to the state weighted RVR by multiplying the stratum RVR (Column 7) by the relative stratum weight (Column 9). The weighted RVR for the state will be shown in the Total row of Column 10.
- Column 11: Form 2 (in Excel form) automatically calculates the standard error of each stratum's RVR (Column 7). The standard error for the state weighted RVR will be shown in the Total row of Column 11.
- TOTAL:** For Columns 2–6, Form 2 (in Excel form) provides totals for the state as a whole in the last row of the table. For Columns 7–11, it calculates the respective statistic for the state as a whole.

FORM 2 (Optional) Appropriate for stratified simple or systematic random sampling designs.

Calculation of Weighted Retailer Violation Rate										
										State: _____
										FFY: 2016
(1) Stratum Name	(2) N Number of Outlets in Sampling Frame	(3) n Original Sample Size	(4) n1 Number of Sample Outlets Found Eligible	(5) n2 Number of Outlets Inspected	(6) x Number of Outlets Found in Violation	(7) p=x/n2 Stratum Retailer Violation Rate	(8) N'=N(n1/n) Estimated Number of Eligible Outlets in Population	(9) w=N'/Total Column 8 Relative Stratum Weight	(10) pw Stratum Contribution to State Weighted RVR	(11) s.e. Standard Error of Stratum RVR
Total										

- N - number of outlets in sampling frame
- n - original sample size (number of outlets in the original sample)
- n1 - number of sample outlets that were found to be eligible
- n2 - number of eligible outlets that were inspected
- x - number of inspected outlets that were found in violation
- p - stratum retailer violation rate (p=x/n2)
- N' - estimated number of eligible outlets in population (N'=N*n1/n)
- w - relative stratum weight (w=N'/Total Column 8)
- pw - stratum contribution to the weighted RVR
- s.e. - standard error of the stratum RVR

FORM 3 (Required when a cluster design is used for all states not using the Synar Survey Estimation System [SSES] to analyze the Synar survey data.)

Complete Form 3 to report information about primary sampling units when a cluster design was used for the Synar survey.

Instructions for Completing Form 3: In the top right-hand corner of the form, provide the state name and reporting federal fiscal year (FFY 2016).

Provide information by stratum if stratification was used. Make copies of the form if additional rows are needed to list all the strata.

Column 1: Sequentially number each row.

Column 2: *If stratification was used:* Write in the name of stratum. All strata in the state must be listed.

If no stratification was used: Write “state” in the first row to indicate that the whole state constitutes a single stratum.

Column 3: Report the number of primary sampling units (PSUs) (i.e., first-stage clusters) created for each stratum.

Column 4: Report the number of PSUs selected in the original sample for each stratum.

Column 5: Report the number of PSUs in the final sample for each stratum.

TOTALS: For Columns 3–5, provide totals for the state as a whole in the last row of the table.

Summary of Clusters Created and Sampled				
State: _____				
FFY: 2016				
(1) Row #	(2) Stratum Name	(3) Number of PSUs Created	(4) Number of PSUs Selected	(5) Number of PSUs in the Final Sample
Total				

FORM 4 (Required for all states not using the Synar Survey Estimation System [SSES] to analyze the Synar Survey data)

Complete Form 4 to provide detailed tallies of ineligible sample outlets by reasons for ineligibility and detailed tallies of eligible sample outlets with noncomplete inspections by reasons for noncompletion.

Instructions for Completing Form 4: In the top right-hand corner of the form, provide the state name and reporting federal fiscal year (FFY 2016).

Column 1(a): Enter the number of sample outlets found ineligible for inspection by reason for ineligibility. Provide the total number of ineligible outlets in the row marked "Total."

Column 2(a): Enter the number of eligible sample outlets with noncomplete inspections by reason for noncompletion. Provide the total number of eligible outlets with noncomplete inspections in the row marked "Total."

Inspection Tallies by Reason of Ineligibility or Noncompletion			
		State: _____	
		FFY: 2016	
(1) INELIGIBLE		(2) ELIGIBLE	
Reason for Ineligibility	(a) Counts	Reason for Noncompletion	(a) Counts
Out of business		In operation but closed at time of visit	
Does not sell tobacco products		Unsafe to access	
Inaccessible by youth		Presence of police	
Private club or private residence		Youth inspector knows salesperson	
Temporary closure		Moved to new location	
Unlocatable		Drive-thru only/youth inspector has no driver's license	
Wholesale only/Carton sale only		Tobacco out of stock	
Vending machine broken		Ran out of time	
Duplicate		Other noncompletion reason(s) (<i>Describe.</i>)	
Other ineligibility reason(s) (<i>Describe.</i>)			
Total		Total	

FORM 5 (Required for all states not using the Synar Survey Estimation System [SSES] to analyze the Synar survey data)

Complete Form 5 to show the distribution of outlet inspection results by age and gender of the youth inspectors.

Instructions for Completing Form 5: In the top right-hand corner of the form, provide the state name and reporting federal fiscal year (FFY 2016).

Column 1: Enter the number of attempted buys by youth inspector age and gender.

Column 2: Enter the number of successful buys by youth inspector age and gender.

If the inspectors are age eligible but the gender of the inspector is unknown, include those inspections in the “Other” row. Calculate subtotals for males and females in rows marked “Male Subtotal” and “Female Subtotal.” Sum subtotals for Male, Female, and Other and record in the bottom row marked “Total.” Verify that the total of attempted buys and successful buys equals the total for Column 4(c) and Column 5(c), respectively, on Form 1. If the totals do not match, please explain any discrepancies.

Synar Survey Inspector Characteristics		
		State: _____
		FFY: 2016
	(1) Attempted Buys	(2) Successful Buys
Male		
15 years		
16 years		
17 years		
18 years		
Male Subtotal		
Female		
15 years		
16 years		
17 years		
18 years		
Female Subtotal		
Other		
Total		

APPENDIXES 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 appendixes, therefore, should generally describe the design and protocol and, with the exception of Question #10 of Appendix B, 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: TN
 FFY: 2016

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
- 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

Name of Frame Source	Type of Source	Description	Updating Method and Cycle
Digital Health, Inc.	4	The frame was created from databases maintained by the TN Department of Agriculture (TDA) and the TN Department of Health (TDH) that list establishments selling tobacco products. Only businesses that are accessible to minors are included in the frame. The TDA establishments include nationally owned convenience stores, grocery chains, and locally owned stores. The TDH database contains restaurants, hotels, motels, bowling alleys, and game rooms. Permits are required for operating retail food establishments.	Most retail and health establishments are inspected twice a year. Retail Food Store Inspectors inspect stores that sell tobacco products over the counter or at self-serve displays. Retail tobacco shops are inspected annually. Food Service Inspectors assess restaurants, game rooms, and hotels that generally sell tobacco products in vending machines. Information on businesses selling tobacco is entered into the Digital Health database.

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

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(s) they are not included in the Synar survey. Please check all that apply.

- State law bans vending machines.
- State law bans vending machines from locations accessible to youth.
- State has a contract with the FDA and is actively enforcing the vending machine requirements of the Family Smoking Prevention and Tobacco Control Act.
- Other (Please describe.) _____

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

Census (STOP HERE: Appendix B is complete.)

Unstratified statewide sample:

- Simple random sample (Go to Question 9.)
- Systematic random sample (Go to Question 6.)
- Single-stage cluster sample (Go to Question 8.)
- Multistage 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.)
- Multistage 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.

Simple random sampling for over-the-counter establishments is used to draw Tennessee's Synar sample. Sampling is done within stratum, which ensures adequate geographic representation of the State's tobacco outlets. Establishments within stratum are put in order by establishment, and then by zip code.

Excel's random number generator is used to assign a random number to each establishment. The list is then sorted by random number. Based on these random numbers, samples are drawn for each stratum until the number to be sampled is reached.

Sample sizes are also adjusted for over-the-counter establishments, by stratum, based on the previous year's response rate. Heavier sampling takes place in stratum where response rates were poor in an attempt to provide adequate coverage.

Six (6) over-the-counter strata are created representing West, Middle, and East Tennessee. Davidson, Knox, and Shelby Counties contain the major metropolitan cities of Nashville, Knoxville, and Memphis, respectively. There are a total of six (6) strata from which to collect data.

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 multistage clusters are used, give definitions of clusters at each stage.)

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.

9. Provide the following information about determining the Synar Sample.

a. Was the Synar Survey Estimation System (SSES) used to calculate the sample size?

Yes (Respond to part b.)

No (Respond to part c and Question 10c.)

b. SSES Sample Size Calculator used?

State Level (Respond to Question 10a.)

Stratum Level (Respond to Question 10a and 10b.)

c. Provide the formulas for determining the effective, target, and original outlet sample sizes.

See attached Documentation TN_9C_Calculating_Sample_Sizes_Final_12_15_14

10. Provide the following information about sample size calculations for the current FFY Synar survey.

a. If the state uses the sample size formulas embedded in the SSES Sample Size Calculator to calculate the state level sample size, please provide the following information:

Inputs for Effective Sample Size:

RVR: 50

Frame Size: 7, 404

Input for Target Sample Size:

Design Effect: 1

Inputs for Original Sample Size:

Safety Margin: 0

Accuracy (Eligibility) Rate: 84.8

Completion Rate: 96.5

- b. If the state uses the sample size formulas embedded in the SSES Sample Size Calculator to calculate the stratum level sample sizes, please provide the stratum level information:**

Stratum 301 - 930 (West TN) Stratum 302 - 2,217 (Middle TN) Stratum 305 - 2,197 (East TN) Stratum 309 - 1,082 (Shelby County - Contains Memphis) Stratum 310 - 659 (Davidson County - Contains Nashville) Stratum 311 - 319 (Knox County - Contains Knoxville)

- c. If the state does not use the sample size formulas embedded in the SSES Sample Size Calculator, please provide all inputs required to calculate the effective, target, and original sample sizes as indicated in Question 9.**

--

APPENDIX C: SYNAR SURVEY INSPECTION PROTOCOL

State: TN

FFY: 2016

Note: Upload to WebBGAS a copy of the Synar inspection form under the heading “Synar Inspection Form” and a copy of the protocol used to train inspection teams on conducting and reporting the results of the Synar inspections under the heading “Synar Inspection Protocol.”

1. How does the state Synar survey protocol address the following?

a. Consummated buy attempts?

- Required
 Permitted under specified circumstances (Describe: _____)
 Not permitted

b. Youth inspectors to carry ID?

- Required
 Permitted under specified circumstances (Describe: _____)
 Not permitted

c. Adult inspectors to enter the outlet?

- Required
 Permitted under specified circumstances (Describe: _____)
 Not permitted

d. Youth inspectors to be compensated?

- Required
 Permitted under specified circumstances (Describe: _____)
 Not permitted

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): Tennessee Department of Agriculture

3. Are Synar inspections combined with law enforcement efforts (i.e., do law enforcement representatives 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 type of tobacco products that are requested during Synar inspections.

a. What type of tobacco products are requested during the inspection?

- Cigarettes
 Small Cigars/Cigarillos
 Smokeless Tobacco
 Other

b. Describe the protocol for identifying what types of products and what brands of products are requested during an inspection.

During the annual Synar training, the inspectors are asked to discuss with their youth the type of tobacco product and the brand name of the product. During the youth training, the inspector and the minor will agree on the most popular type of tobacco product and the most popular brand in their area. They request the same type of product and brand name, and also have a back-up plan in case the establishment does not have the specific product.

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

An annual inspectors' statewide Synar training is held each Spring by the Synar Coordinator. Inspectors are given materials including a Synar Protocol; random county list to be surveyed; instructional guide and youth inspectors' packets. After the adult inspectors are trained, they may recruit youths in their community to work with them or work with youth who are already assisting in the tobacco enforcement program. If necessary, the Synar Coordinator has a list of contacts and will recruit the youth inspectors. During the youth training, the adult inspector explains the program to the youth and his/her parent. Written parental consent is mandatory. A variety of scenarios are discussed to better prepare the youths for any questions they may be asked during the survey. Youth must answer truthfully and do not carry an ID with them. They are encouraged to keep the survey confidential. To ensure confidentiality of the minors, they're assigned a minor ID number for identification.

6. 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.)

b. Procedural

Yes No

(If Yes, please describe.)

7. 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.)

Inspectors are not required to conduct Synar or enforcement inspections in establishments that appear to be unsafe. During all inspections, adults are asked to enter the establishment a few seconds before the minor so they may view the surroundings. The inspector should terminate the inspection immediately if he believes the establishment poses a threat to himself and/or the minor.

8. 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.)

TCA Chapter 5, Section 50-5-109 states a birth certificate or other proof of age is required before any minor may be employed or continue to be employed. TCA Chapter 5, Section 50-5-115 states a “minor must have a thirty (30) minute unpaid break or meal period if scheduled to work six hours consecutively.”

TCA Chapter 5, Section 50-5-105 states a minor, “16 or 17 years of age enrolled in school, may not be employed during those hours when the minor is required to attend classes and between the hours of ten p.m. and six a.m. Sunday through Thursday evenings preceding a school day”.

b. Procedural

Yes No

(If Yes, please describe.)

Minors must be between the ages of sixteen (16) and seventeen (17) years old to participate in the Synar Program. Inspectors are required to meet with the parent and child to discuss the Synar protocol and answer any questions. The parent is provided with a packet explaining the program. Copies of the minor's social security card, birth certificate, and school record or drivers' license are required along with other documents including the written parental consent form.

APPENDIX D: LIST SAMPLING FRAME COVERAGE STUDY

(LIST FRAME ONLY)

State: TN

FFY: 2016

1. Calendar year of the coverage study: 2015
2.
 - a. Unweighted percent coverage found: 93.8%
 - b. Weighted percent coverage found: 93.8%
 - c. Number of outlets found through canvassing: 160
 - d. Number of outlets matched on the list frame: 150
3.
 - a. Describe how areas were defined. (*e.g., census tracts, counties, etc.*)

For the 2015 coverage study, one thousand two hundred nine (1,209) establishments were visited. Of those, one thousand forty-nine (1,049) did not sell tobacco products and/or were not accessible to youth under the age of 18. Of the establishments visited, one hundred sixty (160) sold tobacco and were accessible to youth. Of the one hundred sixty (160) accessed by youth, ten (10) establishments were not in our database used for the Master List. Of the ones missing, two were liquor stores and one was a golf course that sells only cigars.

The Master List is derived from inspections conducted by the Food and Dairy Section for sanitation purposes. Historically, Tennessee's Food and Dairy Section have not inspected liquor stores or golf courses. We believe some liquor stores may have started selling tobacco products to increase revenue due to passage of legislation allowing wine sales in retail food stores. Currently, there are no plans to add liquor stores to our database.

The last Tennessee Coverage Study was conducted in 2010. Guidelines provided by SAMHSA, using population census tracts to determine areas to be sampled, were used. The Census Bureau website, <http://www.census.gov/geo/www/tiger>, was used in the study. Tracts of the State to be canvassed were based on a SAS program designed by our senior statistician. The Census Bureau gives each tract within each of our 95 counties a unique number.

The 2010 Census Tract Outline maps were downloaded. Clear regional (East, West, Middle) areas of the state were already defined. No more than 20 segments were selected for Tennessee, using the SAS program documented below. Stratum size was taken into consideration and necessary adjustments (combining small areas and splitting large areas, overlapping areas, elimination of areas restricted because of security such as the Oak Ridge facility; areas containing water only, etc. made

prior to sampling. Coverage of all areas within the State was also taken into consideration.

b. Were any areas of the state excluded from sampling?

Yes No

If Yes, please explain.

Tracts that consist of water only and/or deemed unsafe were excluded from sampling. Nuclear plants were also excluded due to security restrictions. One tract was substituted due to safety concerns.

4. Please answer the following questions about the selection of canvassing areas.

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

Census (*Go to Question 6.*)

Unstratified statewide sample:

- Simple random sample (*Respond to Part b.*)
- Systematic random sample (*Respond to Part b.*)
- Single-stage cluster sample (*Respond to Parts b and d.*)
- Multistage cluster sample (*Respond to Parts b and d.*)

Stratified sample:

- Simple random sample (*Respond to Parts b and c.*)
- Systematic random sample (*Respond to Parts b and c.*)
- Single-stage cluster sample (*Respond to Parts b, c, and d.*)
- Multistage cluster sample (*Respond to Parts b, c, and d.*)
- Other** (*Please describe and respond to Part b.*) _____

b. Describe the sampling methods.

See Attached 2015 Synar Coverage Study Documentation

c. Provide a full description of the strata that were created.

See Attached 2015 Synar Coverage Study Documentation

d. Provide a full description of how clusters were formed.

5. Were borders of the selected areas clearly identified at the time of canvassing?

Yes No

6. Were all sampled areas visited by canvassing teams?

Yes (*Go to Question 7.*) **No** (*Respond to Parts a and b.*)

a. **Was the subset of areas randomly chosen?**

Yes **No**

b. **Describe how the subsample of visited areas was drawn. Include the number of areas sampled and the number of areas canvassed.**

7. Were field observers provided with a detailed map of the canvassing areas?

Yes **No**

If No, describe the canvassing instructions given to the field observers.

8. Were field observers instructed to find all outlets in the assigned area?

Yes **No**

If No, respond to Question 9.

If Yes, describe any instructions given to the field observers to ensure the entire area was canvassed, then go to Question 10.

A statewide training session was held in Nashville, TN. Tobacco inspectors were provided maps and given instructions on map reading. They were instructed to canvass the entire area within the selected census tract to determine if the establishments sold tobacco products and were accessible to persons under the age of 18.

9. If a full canvassing was not conducted:

a. **How many predetermined outlets were to be observed in each area? _____**

b. **What were the starting points for each area? _____**

c. **Were these starting points randomly chosen?**

Yes **No**

d. **Describe the selection of the starting points.**

e. **Please describe the canvassing instructions given to the field observers, including predetermined routes.**

10. Describe the process field observers used to determine if an outlet sold tobacco.

The inspectors were provided a cover study inspection sheet to be completed for each establishment visited. The inspectors interviewed workers to verify if the establishment sold tobacco products and were accessible to minors. The establishments' name and address were also verified.

11. Please provide the state’s definition of “matches” or “mismatches” to the Synar sampling frame? (i.e., address, business name, business license number, etc).

The inspectors completed the coverage study inspection sheet which included the name and address of the establishments. The addresses of the establishments that sold tobacco and were accessible to youth were entered into our database system. Any establishments with the same address were considered to be a match.

12. Provide the calculation of the weighted percent coverage (if applicable).