



# COVERAGE STUDY REPORT FY2022

## Abstract

The Coverage Study which is conducted every three years is designed to determine the quality and completeness of the master tobacco retailers' list frame. Twenty-one census tracts from six counties were randomly selected for canvassing. Once the canvassing was completed, the overall coverage rate (97.8%) was calculated.

Alabama Dept. of Mental Health  
Division of Mental Health &  
Substance Abuse Services  
Office of Prevention  
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## ***Introduction***

Alabama is required to conduct annual unannounced random inspection of tobacco retailers to determine the compliance rate with laws prohibiting the sale of tobacco products to persons under the age of 21 under the Substance Abuse Prevention and Treatment (SAPT) block grant Synar requirement. To fulfill the Synar requirement, states conduct a Synar survey each year by inspecting a random sample of tobacco retail outlets and estimating the overall state retailer violation rate (RVR) based on the results of the inspection from the sampled outlets. The Coverage Study is designed to determine the quality and completeness of the master tobacco retailers' list frame, which is maintained by the Alabama Alcoholic Beverage Control Board (ABC Board). This list frame is used to sample tobacco retail outlets for the Synar compliance checks, which determines the retailer violation rate for the state based on unannounced inspections of a sample of tobacco retail outlets. Therefore, the coverage study, which should be conducted every three years, is needed to assess the quality of the list frame and to assess whether the results from the Synar survey are valid and unbiased.

Substance Abuse and Mental Health Services Administration (SAMHSA) recommend a 90% coverage rate and requires at least an 80% coverage rate.

## ***Sample Design for the Coverage Study***

Since surveying rural areas is generally more costly, due to remoteness, sparseness, and distance factors, stratified design will be used for the coverage study. Counties were denoted as urban or rural. The census tract is chosen as the area frame for the coverage study. Counties served as the step of sampling followed by sampling by census tracts. Stratifying the sampling areas by rural and urban makes it possible to treat rural and urban areas differently in sampling, especially by undersampling rural area to reduce the costs and efforts associated with rural areas. The overall sample size is set to be a number between 130 and 200 on the area size. Alabama sample size is 133 with average area size of 7 and number of areas 19.

**Table 1: Sample Size Determination Chart**

|                              |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Average area size (m)        | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18  | 19  | 20  |
| Number of areas (k)          | 19  | 17  | 16  | 15  | 14  | 14  | 13  | 13  | 12  | 12  | 11  | 11  | 10  | 10  |
| Total outlet sample size (n) | 133 | 136 | 144 | 150 | 154 | 168 | 169 | 182 | 180 | 192 | 187 | 198 | 190 | 200 |

**Table 2: List Frame and Sample Size**

|   | Value |
|---|-------|
| Total List Frame Size (N)                           | 7939  |
| Urban Stratum Size (Nu)                             | 4325  |
| Rural Stratum Size (Nr)                             | 3614  |
| Average Area Size ( <i>m</i> )                      | 6.7   |
| Total Outlet Sample Size for the Coverage Study (n) | 133   |
| Outlet Sample Size for the Urban Stratum (nu)       | 84    |
| Outlet Sample Size for the Rural Stratum (nr)       | 49    |
| Total Census Tracts in AL                           | 1181  |
| ku: Number of Selected Urban Tracts                 | 11    |
| kr: Number of Selected Rural Tracts                 | 10    |
| Total Number of Selected Tracts                     | 21    |
| Ku: Total Urban Tracts                              | 670   |
| Kr: Total Rural Tracts                              | 511   |

Alabama is comprised of 67 counties with 55 classified as “rural” and 12 are classified as “urban”. The determination of rural and urban for each county was determined based on the Alabama Department of Public Health Office of Rural Health Policy’s *Selected Indicators of Health Status in Alabama*.

Using simple random sampling, in the first stage of selection of the canvassing area, six counties (3 rural and 3 urban) were randomly selected. Last, census tracts were randomly selected within the six counties. Ten rural census tracts was selected from rural counties and eleven was selected from urban census tracts.

The selected counties and census tracts are listed below:

Rural Counties and Census Tracts

Chilton – 601.04; 602; 601.03

Elmore – 305; 308.01; 313

Macon – 2318; 2316.02; 2315; 2316.03

Urban County and Census Tracts

Lee – 409.01; 420.02; 414; 411.03

Tuscaloosa – 107.04; 123.07; 103.05;

Montgomery – 54.02; 55.03; 16; 33.04

## ***Procedures for Field Canvassing***

Office of Prevention staff members canvassed assigned census tracts in pairs to identify tobacco retail outlets that were accessible to minors. The canvassing was done without the assistance of the existing list used for the Synar inspections that is maintained by the ABC Board. The ABC Board was notified by Department of Mental Health (DMH) Prevention Director that staff will be in the area conducting the coverage study.

Upon assignments of census tract(s), staff members were provided with maps that clearly define the boundaries of each census tract. Census tracts maps was obtained from the United States Census Bureau website, [www.census.gov](http://www.census.gov). Staff members were responsible for canvassing the entire census, including those streets that may be too small or too new to have been included in detail on the map. Staff members were also provided with a letter for business owners explaining the coverage study (Appendix 1).

Staff members identified and physical inspected all tobacco retail outlets that are accessible to minor within their assigned census tracts(s). The tobacco retail outlets included gas stations (free-standing and those with stores), grocery stores, convenience stores, drug stores, alcohol stores, and tobacco stores. Staff members will enter the location and visually scan the store for the availability of tobacco products.

If tobacco products were present, the staff member asks to review the permit (Appendix 2). If the outlet provided the permit, the staff member recorded the information from the permit onto the inspection form (Appendix 3). Any refusals to review the permit, hesitations, or other observations was noted on the inspection form. If the outlet would or could not provide the permit, staff members gather as much information on the inspection form from observation or interview the store employees/managers.

Staff members canvassed a total of 21 census tracts plus one census tract was not canvassed due to the area being a military base. Out of the 21 canvassed tract only one census tract, Coffee-104 did not have any tobacco retail outlets found.

Inspection forms were submitted for each retail outlet identified during canvassing of each census tract to the ADMH Epidemiologist. The information from each inspection form was entered into an excel spreadsheet. After all inspection forms have been input and compared for matches, the coverage rate will be determined.

## ***Coverage Rate***

The tobacco retail outlets identified during the coverage study were compared to the tobacco retailers list used for Synar by the ABC Board. The coverage study identified 138 tobacco retail outlets. Outlets that were identified during the canvassing but did not have a corresponding license number on the ABC list were considered to be not found on the list. The matching process is done in two steps. First, each outlets on the canvassing list that is clearly and easily confirmed by the license number as one appearing on the list frame. Second, the remaining outlets are assessed based on name of outlet and address. If a match is not found, further analysis was done to identify discrepancies that could affect outlet matching such as misspellings, transposed numbers, multiple street names, and business relocations. Any outlet not found on the list frame is deemed missing (non-match) from the list frame.

**Table 3: Coverage Study Results for Alabama by Census Tract**

| <b>County</b>        | <b>Census Tract</b> | <b>Number of Outlets Identified</b> | <b>Number of Outlets Not Matched to ABC List Frame</b> | <b>Percentage of Outlets Matched to ABC List Frame</b> |
|----------------------|---------------------|-------------------------------------|--|--|
| <b>Rural</b>         |                     |                                     |  |  |
| Chilton              | 601.03              | 4                                   | 0  | 100  |
|                      | 601.04              | 10                                  | 0  | 100  |
|                      | 602                 | 6                                   | 0  | 100  |
| Elmore               | 305                 | 11                                  | 0  | 100  |
|                      | 308.01              | 7                                   | 0  | 100  |
|                      | 313                 | 12                                  | 1  | 92   |
| Macon                | 2315                | 5                                   | 0  | 100  |
|                      | 2316.02             | 3                                   | 0  | 100  |
|                      | 2316.03             | 2                                   | 0  | 100  |
|                      | 2318                | 6                                   | 0  | 100  |
| <b>Rural Total</b>   |                     | <b>66</b>                           | <b>1</b>   | <b>98</b>  |
| <b>Urban</b>         |                     |                                     |  |  |
| Lee                  | 409.01              | 6                                   | 0  | 100  |
|                      | 411.03              | 8                                   | 1  | 88   |
|                      | 414                 | 7                                   | 0  | 100  |
|                      | 420.02              | 8                                   | 0  | 100  |
| Montgomery           | 16                  | 6                                   | 0  | 100  |
|                      | 33.04               | 5                                   | 0  | 100  |
|                      | 54.02               | 10                                  | 0  | 100  |
|                      | 55.03               | 8                                   | 0  | 100  |
| Tuscaloosa           | 103.05              | 5                                   | 0  | 100  |
|                      | 107.04              | 3                                   | 0  | 100  |
|                      | 123.07              | 6                                   | 1  | 83   |
| <b>Urban Total</b>   |                     | <b>72</b>                           | <b>2</b>   | <b>97</b>  |
| <b>Overall Total</b> |                     | <b>138</b>                          | <b>3</b>   | <b>98</b>  |

Overall, there were 3 outlets that did not correspond to the list maintained by the ABC Board. The coverage rate was calculated as the ratio of the total number (b= 135) of matched outlets on the frame divided by the total number (n=138) of outlets found by the coverage study (Coverage Rate =  $(b/n) * 100 = 135/138 * 100 = 97.8\%$ )

***Conclusion***

The rural coverage rate is 98% and the urban coverage rate is 97%. The overall coverage rate for Alabama is 97.8% which is above the recommended rate.

Appendix 1: Letter to Business Owner



STATE OF ALABAMA  
**DEPARTMENT OF MENTAL HEALTH**  
RSA UNION BUILDING  
100 NORTH UNION STREET  
POST OFFICE BOX 301410  
MONTGOMERY, ALABAMA 36130-1410  
WWW.MH.ALABAMA.GOV



ABC Tobacco Permittees

RE: Synar Coverage Study

To Whom It May Concern:

I am a representative of the Alabama Department of Mental Health, Office of Prevention. The Alabama Department of Mental Health is required by law to conduct a Synar Coverage Study every three years. The Synar Coverage Study evaluates the total list of permitted tobacco retailers in the state.

I am canvassing stores in your area from September 1, 2021 – to October 31, 2021 to verify permits. We are only reviewing your current tobacco permit for information in your establishment such as the permit number, name, and address. If your permit is posted as required, the process should not cause any disruption in the establishment and takes about 5 minutes.

If you have any questions or concerns, please feel free to contact the supervisor at the number or contact information listed below.

Thank you for your cooperation.





Sincerely,

Beverly Johnson  
Director, Office of Prevention Services  
Alabama Department of Mental Health  
Division of Mental Health & Substance Abuse Services  
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Appendix 2: Example of the Alcoholic Beverage Control Board Permit

|   |   |   |
|---|---|---|
|    | <p>STATE OF ALABAMA<br/><b>ALCOHOLIC BEVERAGE CONTROL BOARD</b><br/>MONTGOMERY, ALABAMA</p> |  |
| <p>LICENSE EXPIRES SEPTEMBER 30,<br/>RENEW LICENSE(S) BEFORE AUGUST 1,<br/>Confirmation Number: 2013072500006502<br/>Renewal Period: June 1, 2014 Through July 31, 2014</p>   |   |   |
| <p><b>License Number: 0000</b></p>  |   |   |
| County:   | Tobacco Business Type: 42   | Vending Machines: 0   |
| Effective Date:   | Printed Date:   |   |
| Trade Name:   | _____   |   |
| Licensee:   | _____   |   |
| Location:   | _____   |   |
| Mailing Address:  | _____   |   |
| Alabama Sales Tax ID:   | _____   |   |
| 990 TOBACCO   |   |   |
| <p>These privileges have been issued under the provisions of Title 28, Code of Alabama (1975) effective on the date as shown above and continuing until expiration date set forth above unless sooner surrendered, suspended or revoked by the Board.</p> |   |   |
| <p>These privileges are not assignable and are valid for use only by the licensee named hereon at the location hereon designated. Witness the hand and seal of the ABC Board.</p>   |   |   |
| <p>For questions or assistance go to our website <a href="http://www.abc.alabama.gov">www.abc.alabama.gov</a> click license and find the district contact number that services the county for this license.</p>   |   |   |
| 4739  |   |   |
|    |        | ADMINISTRATOR   |

**Coverage Study Inspection Form 2021**

Inspector: \_\_\_\_\_ County: \_\_\_\_\_

Date & Time: \_\_\_\_\_ Census Tract: \_\_\_\_\_

Landmarks: \_\_\_\_\_

**Observation Only:**

Tobacco Products Visible in the Location: YES NO

Tobacco Products Over the Counter: YES NO

Tobacco Products Behind Counter: YES NO

Tobacco Advertising Visible: YES NO

Person Interviewed (If Applicable): \_\_\_\_\_

**Ask to see the tobacco license and record the following from the license and/or interview:**

No Permit Displayed

Name of Business: \_\_\_\_\_

Other Business Names: \_\_\_\_\_

Street Address: \_\_\_\_\_

City, State, Zip Code: \_\_\_\_\_

Mailing Address (If Different): \_\_\_\_\_

\_\_\_\_\_

Permit Number: \_\_\_\_\_

Effective Date: \_\_\_\_\_

Additional Information: \_\_\_\_\_

\_\_\_\_\_

**Reason for Not Entering, if applicable:** \_\_\_\_\_

\* Look for 990 Tobacco on permit. Other codes may be listed.