

# **ANNUAL SYNAR REPORT**

**42 U.S.C. 300x-26**

OMB № 0930-0222

**FFY 2020**

**State: MA**

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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 Substance Abuse Prevention and Treatment Block Grant (SABG) (45 C.F.R. 96.130 (e)).

### **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 2019 Compliance Progress) and future plans to ensure compliance with the Synar requirements to reduce youth tobacco access rates (FFY 2020 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. The information to be reported is public (45 CFR 96.130 (f)) and is not confidential. Part of the mission of the Center for Substance Abuse Prevention (CSAP) is to assist states<sup>1</sup> 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 onsite technical assistance consultation.

### **How the Synar report can help states**

The information gathered for the Synar report can help states describe and analyze substate 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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<sup>1</sup>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) 276-2550 and ask for your respective State Project Officer, or contact your State Project Officer directly by telephone or email. If you have questions about fiscal or grants management issues, you may call the Grants Management Officer, Office of Financial Resources, Division of Grants Management, at (240) 276-1422.

## Where and when to submit the Synar report

The ASR must be received by SAMHSA no later than December 31, 2019 and must be submitted in the format specified by these instructions. 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 one of the ASR certifying that the state has complied with all reporting requirements.

The state must upload one copy of the ASR using the online WebBGAS (Block Grant Application System). In addition, the following items must be uploaded to WebBGAS:

- FFY 2020 Synar Survey Results: States that use the Synar Survey Estimation System (SSES) must upload one copy of *SSES Tables 1–8* (in Excel) to WebBGAS. **Please note that, beginning with the FFY 2019 ASR, SSES will generate Tables 6, 7, and 8, which are based on the optional microdata on product type, retail outlet type, and whether identification was requested. If your state does not submit these optional data, Tables 6, 7, and 8 will be blank. Tables 6, 7, and 8 are generated for the convenience of the state, and states are not required to submit completed versions of Tables 6, 7, or 8.** 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), as well as a database with the raw inspection data to WebBGAS.
- Synar Inspection Form: States must upload one blank copy of the inspection form used to record the result of each Synar inspection.
- Synar Inspection Protocol: States must upload a copy of the protocol used to train inspection teams on conducting and reporting the results of the Synar inspections. This document should be different than the Appendix C attached to the Annual Synar Report.
- A scanned copy of the signed Funding Agreements/Certifications

Each state SSA Director has been emailed a login ID and password to log onto the Synar section of the WebBGAS site.

## FFY 2020: 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.

### **PUBLIC HEALTH SERVICES ACT AND SYNAR AMENDMENT**

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.

### **SYNAR SURVEY SAMPLING METHODOLOGY**

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 2020 is up-to-date and approved by the Center for Substance Abuse Prevention.

### **SYNAR SURVEY INSPECTION PROTOCOL**

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 2020 is up-to-date and approved by the Center for Substance Abuse Prevention.

**State:**

**Name of Chief Executive Officer or Designee:**

**Signature of CEO or Designee:**

**Title:** \_\_\_\_\_ **Date Signed:** \_\_\_\_\_

**If signed by a designee, a copy of the designation must be attached.**

## SECTION I: FFY 2019 (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 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  Other (Please specify.)

\_\_\_\_\_

**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
- Changed definition of tobacco products
- Other change(s) (Please describe.)

On 7/27/2018, Governor Baker signed H4486, *An Act protecting youth from health risks of tobacco and nicotine addiction*, which gradually raises the legal age to buy tobacco products from 18 to 21. The law broadens existing prohibitions on public smoking to include e-cigarettes and prohibits the use of tobacco products on the grounds of any public or private primary, secondary, or vocational school. Additionally, pharmacies, hospitals, or other entities that offer health care services or employ any licensed health care providers are prohibited from selling tobacco products.

The law went into effect on December 31, 2018. The new sales law provides that no person shall sell or provide a tobacco product to a person who is under 21 years of age. However, it exempts anyone **born before December 31, 2000**. This means that anyone who turned eighteen (18) by or on December 31, 2018, is exempt from the law and may continue to be sold tobacco.

On Wednesday, November 27, 2019, Governor Baker signed *An Act Modernizing Tobacco Control* into law. This legislation substantially restricts the sale of e-cigarette and nicotine vaping products and flavored tobacco products.

The law grants the Massachusetts Department of Public Health (DPH) new authority to issue regulations to regulate the sale of nicotine vaping products, to ensure the public is informed about the potential dangers of vaping, including vaping-related lung disease, and to implement other provisions of the law in order to protect the public health. On December 11, 2019, the state's Public Health Council approved new regulations (105 CMR 665.00) that restrict the sale of nicotine vaping and flavored vaping and tobacco products.

This new law immediately restricts the sale of all flavored nicotine vaping products to licensed smoking bars where they may only be consumed on-site. Additionally, the law restricts the sale of vaping products with a nicotine content over 35 milligrams per milliliter to licensed, adult-only retail tobacco stores and smoking bars. Non-flavored vaping products with a nicotine content of less than 35 milligrams per milliliter may be sold in retail stores generally licensed to sell tobacco products (these include convenience stores, gas stations, and other retail outlets).

Fines for sale of tobacco to minors have been increased from \$100, \$200 and \$300 for the first three violations to \$1,000, \$2,000 and \$5,000. The regulation provides that retailers with two or more violations within a 36 month period may have their permit suspended for up to 30 days.

Under this law, beginning on June 1, 2020, the sale of all other tobacco products that have a characterizing flavor (e.g. menthol cigarettes and flavored chewing tobacco) will also be restricted to licensed smoking bars where they may be sold only for on-site consumption. In addition, the new law will require all retailers selling electronic nicotine delivery systems (ENDS) be licensed by the Department of Revenue and that all ENDS products be taxed at a rate of 75% of wholesale.

**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  
Added product categories to youth access law  Yes  No

**2. Describe how the Annual Synar Report (see 45 C.F.R. 96.130(e)) was 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 2020 ASR was posted to this Web address.)

Web address: [www.mass.gov](http://www.mass.gov)

Date published: \_\_\_\_\_

- 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.)* Data from the Annual Synar Report is disseminated to Local Boards of Health and Community Partnership Programs. These programs use this data in hearings and presentations to stakeholders.

**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 Massachusetts Department of Public Health

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

Yes  No

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

The Massachusetts Department of Public Health in conjunction with Local Boards of Health and Community agencies

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):**

Massachusetts Attorney General's Office, Massachusetts Department of Public Health in conjunction with Local Boards of Health

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).**

Massachusetts Department of Public Health, Massachusetts Tobacco Cessation and Prevention Program (MTCP)

**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.)* \_\_\_\_\_
- No relationship

**d. Does a state agency contract with the Food and Drug Administration’s Center for Tobacco Products (FDA/CTP) to enforce the youth access and advertising restrictions in the Family Smoking Prevention and Tobacco Control Act?**

- Yes  No (if no, go to Question 5)

**e. If yes, 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)).**

Massachusetts Department of Public Health, Massachusetts Tobacco Cessation and Prevention Program. (MTCP)

**f. Has the responsible agency changed since last year’s Annual Synar Report?**

- Yes  No

**g. 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.)* \_\_\_\_\_
- No relationship

**h. 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 2019 (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 local laws or 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 citations issued	309	76	315
Number of fines assessed	309	6	315
Number of permits/licenses suspended			
Number of permits/licenses revoked			
Other (Please describe.)			

- c. 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 5c, 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:

*Depending on the municipality, citations or warning may be issued to retailers that sell during Synar inspections. To minimize the risk of bias to survey results, it is MTCP’s protocol that fines and tickets be issued at the end of the round of compliance checks later the same day of the check or the next day after the check instead of immediately after the sale. This protocol reduces the risk of “phone trees” that could potentially bias subsequent checks. This protocol also helps protect the safety and anonymity of the youth buyer.*

- d. 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.

- e. 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

- f. What additional activities are conducted in your state to support enforcement

**and compliance with state youth tobacco access law(s)?** (Check all that apply and briefly describe each activity in the text boxes below each activity.)

Merchant education and/or training

In the 184 communities that received Board of Health funding from MTCP in FFY19, a merchant education and/or retail visit occurred at each permitted retailer at least once per fiscal year.

Merchant education visits include checks for state required signage, sales of loose cigarettes, illegal self-service displays, and for current state and local permits. These visits also serve to educate store managers and clerks about tobacco sales laws and regulations that apply to tobacco products and ENDS, FDA regulations, and local regulations that may be stronger than the state law. The retailers have received a Retailer Packet that includes information on the state law requiring clerks to check ID on all customers requesting tobacco that appear to be under age 27. This kit also provides signage, clerk reminder cards/payroll stuffers, customer information cards, fact sheets about tobacco sales laws, and proper forms of ID.

The Retailer Education is now an online training tool. It is being offered in both English and Spanish. Approximately 120 retailers have completed the training in the past year. In municipalities without MTCP funded boards of health, the Massachusetts Health Officers Association Tobacco Program is funded by MTCP to conduct regional trainings for the retailers/clerks that are interested in receiving retailer training. Approximately 95 retailers attended 5 in person regional trainings held throughout the state.

Retailer Education and Training materials are available free of charge to all retailers across the state.

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

Community education regarding youth access laws/local regulations is provided on a regular basis in the communities that currently have MTCP funded boards of health. Technical assistance regarding youth access laws and regulations is provided to any interested board of health through the Massachusetts Association of Health Boards, the Massachusetts Municipal Association, and the Massachusetts Health Officers Association, funded by MTCP.

Further, our website, [makesmokinghistory.org](http://makesmokinghistory.org), has a "My Community" tab, where users can select "What's the impact of tobacco on your community?" and select their city or town from the drop-down box to find out tobacco's impact and obtain information on their local tobacco regulations. Users can also use the interactive maps and view smoking rates in their community relative to others across the state, and which cities and towns have adopted key tobacco control regulations. Detailed explanations of the key tobacco control regulations such as pharmacy bans, permit

capping, cigar packaging and flavor restrictions are also provided on makesmokinghistory.org website.

Media use to publicize compliance inspection results

Earned media is often used by local programs to publicize compliance check inspection results.

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

Strong support for retailer compliance and enforcement of youth access laws exists in the communities that currently have MTCP funded boards of health. In some communities without MTCP-funded boards of health, there is also strong support for retailer compliance and enforcement. Several of these communities have worked with the Massachusetts Health Officers Association and MTCP to determine free and low cost ways that they can prevent youth access to tobacco in their communities without MTCP funding. A few communities have even been able to use local tobacco permit fees and fines for violations to fund compliance checks and retailer education in their communities. MTCP's Community Partnership Programs and The 84 Youth Movement also help to increase community mobilization and support for youth prevention activities and regulations in communities across the Commonwealth.

Other activities (*Please list.*) \_\_\_\_\_

On September 24, 2019, Massachusetts Governor Baker declared a public health emergency in response to the outbreak of severe lung disease associated with e-cigarettes and vaping products. Pursuant to the Governor's declaration, the Commissioner of the Massachusetts Department of Public Health (DPH) issued an emergency order to temporarily prohibit the sale of all vaping products in retail establishments and online within Massachusetts.

At this time, inspections were conducted in all ENDS retail establishments to ensure compliance with the emergency regulations. Inspectors from DPH as well as all local health departments maintained surveillance on retail tobacco stores and vape shops. To assist municipalities with fewer resources DPH inspectors conducted 378 inspections and local health departments conducted over 4,000 inspections. Massachusetts had a strong presence in the retail environment because of this.

## 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 2019 (*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.*

**a. If yes, describe how and when this change was communicated to SAMHSA**

**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, upload a copy of SSES tables 1–8 (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.**

	+	(1.645	×	_____)	=	
<b>RVR Estimate</b>	plus	(1.645	times	<b>Standard Error</b> )	equals	<b>Right Limit</b>

**Accuracy rate** \_\_\_\_\_

**Completion rate** \_\_\_\_\_

c. **Fill out Form 1 (See Appendix A: Forms 1–5 Templates).** *(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) (See Appendix A: Forms 1–5 Templates) *(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 (See Appendix A: Forms 1–5 Templates), 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
<b>Effective sample size</b> (sample size needed to meet the SAMHSA precision requirement assuming simple random sampling)	
<b>Target sample size</b> (the product of the effective sample size and the design effect)	
<b>Original sample size</b> (inflated sample size of the target sample to counter the sample attrition due to ineligibility and noncompletion)	
<b>Eligible sample size</b> (number of outlets found to be eligible in the sample)	
<b>Final sample size</b> (number of eligible outlets in the sample for which an inspection was completed)	

h. **Fill out Form 4 (See Appendix A: Forms 1–5 Templates).**



**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 Sampling frame coverage study:** \_\_\_\_\_

b. **Percent coverage from the latest Sampling 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. **If Yes, describe how and when this change was communicated to SAMHSA**

b. **Provide the inspection period: From 10/01/18 to 9/30/19**  
MM/DD/YY MM/DD/YY

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

80

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

d. **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 2020 (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 2020. 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.

Massachusetts' Synar sales rate for FFY19 was 5.2%, down from 6.8% in FFY18.

MTCP's youth access efforts have historically focused heavily on funding local boards of health to provide merchant education and enforcement of youth access laws. In FFY20, MTCP currently funds 165 of our 351 boards of health in the state to do youth prevention work.

The current scope of service for the funded board of health programs includes assigned Synar compliance checks that are completed using approved protocols, an additional full round of compliance checks for other tobacco products (little cigars, smokeless or e-cigarettes), and required follow up checks at all locations that have violations. Board of health programs conduct enforcement on violations and record the results of their enforcement actions in our Counter Tools Point of Sale Toolkit (POST) system. Also included in the scope of service is the requirement to complete one round of merchant education visits/inspections and an MTCP Pricing Survey at each of their permitted tobacco retailers. The continued presence in the retail environment will help to reduce the illegal sales rates to minors in addition to consistent compliance checks and enforcement.

Massachusetts will continue to complete routine FDA checks at 100% of the retailers in the state, with an emphasis in communities that have high sales rates to minors, along with required re-checks of those with previous sales. After being in place for over nine years in Massachusetts, the FDA is helping to provide strong enforcement and large fines in areas of the state that may not typically have active enforcement of youth access laws. Many retailers have been assessed fines of over \$5,000 and up to \$11,000 and there have been several no tobacco sale orders (NTSO). Many of these fines and NTSOs are at retailers in communities that do not receive MTCP funding.

MTCP has identified that many of the communities that have high sales rates correspond to the communities we have designated as high need. Committed to focusing its programmatic resources in these high need communities, MTCP recently re-procured the funded Board of

Health programs to increase the number of high need communities covered by this funding. With the increased coverage, MTCP anticipates more consistent retail education and enforcement that will lead to lower sales rates, especially in the newly funded high need communities. Many of these communities are located in Strata 2 and Strata 10. These two strata have the highest sales rates in the state according to the SSES.

MTCP meets regularly with the state Department of Revenue (DOR) and the Massachusetts Attorney General's Office (AGO) to discuss tobacco issues. The AGO oversees the state's tobacco master settlement agreement and is the overall enforcement agent for the state's tobacco sales laws.

Last December (2018) Massachusetts increased the minimum legal sale age for tobacco products (including e-cigarettes) to 21. In addition, the legislation banned the sale of all tobacco products in healthcare institutions, such as pharmacies.

On Wednesday, November 27, 2019, Governor Baker signed An Act Modernizing Tobacco Control into law. This legislation substantially restricts the sale of e-cigarette and nicotine vaping products (referred to in the law collectively as "electronic nicotine delivery systems") and flavored tobacco products.

This new law immediately restricts the sale of all flavored nicotine vaping products to licensed smoking bars where they may only be consumed on-site. Additionally, the law restricts the sale of vaping products with a nicotine content over 35 milligrams per milliliter to licensed, adult-only retail tobacco stores. Non-flavored vaping products with a nicotine content of less than 35 milligrams per milliliter may be sold in retail stores generally licensed to sell tobacco products (these include convenience stores, gas stations, and other retail outlets).

Under this law, beginning on June 1, 2020, the sale of all other tobacco products that have a characterizing flavor (e.g. menthol cigarettes and flavored chewing tobacco) will also be restricted to licensed smoking bars where they may be sold only for on-site consumption.

The law grants DPH new authority to issue regulations to regulate the sale of electronic nicotine delivery products, to ensure the public is informed about the potential dangers of vaping, including vaping-related lung disease, and to implement other provisions of the law in order to protect the public health. This was a tremendous step forward for the Commonwealth.

MTCP's core policy work continues to be done at the municipal level providing support and education for municipalities in passing comprehensive regulations – including cigar packaging restrictions, permit capping and restricting the sale of flavored products - to reduce youth exposure and access to tobacco products. To garner public and board of health support for these policies, MTCP funded local tobacco-free community partnership programs will develop partnerships with funded and unfunded communities to help mobilize community members to attend public hearings to strengthen tobacco regulations. MTCP's funded youth groups (The 84) have been learning more about the influence that density of tobacco retail outlets have on their communities. In FFY20, these youth groups will conduct community assessments and engage community members and local decision makers in conversations about the importance of restricting the sale of tobacco products. Technical assistance in developing these regulations is provided to boards of health through our CAST coalition. MTCP continues to maintain a database which tracks adopted regulations and to provide

tools for community and retailer education to assist with post-enactment and effective enforcement of tobacco retail policies.

With the state minimum legal sales age at 21, MTCP engaged a vendor to develop an evaluation plan to look at how raising the MLSA may impact sales rates to minors. MTCP's statewide contracts with the Massachusetts Health Officers Association (MHOA), Massachusetts Municipal Association (MMA), and the Massachusetts Association of Health Boards (MAHB) will continue to provide local boards of health with the skills, resources and technical assistance needed to help communities institute and/or strengthen local youth access laws and effectively provide tobacco services to communities. These statewide TA providers will assist both MTCP funded and unfunded boards of health. Communities that do not have MTCP funding will be offered technical assistance to help develop a plan to provide evidence-based tobacco services with limited resources. The goal of this approach is to build the capacity of communities to have a positive effect on the social norms related to youth tobacco use with or without MTCP funding.

**3. Describe any challenges the state faces in complying with the Synar regulation.** *(Check all that apply and describe each challenge in the text box below it.)*

- a. Limited resources for law enforcement of youth access laws

- b. Limited resources for activities to support enforcement and compliance with youth tobacco access laws

Resources to cover all of the cities and towns in Massachusetts continue to be limited. As of July 1, 2019, only 165 of the 351 cities and towns in Massachusetts have MTCP funding for enforcement of youth access tobacco laws. In the communities without MTCP funding, the enforcement of state youth access laws continues to be limited, often resulting in a higher rate of illegal sales rates to minors. The Massachusetts FDA Enforcement Program complements our statewide efforts by providing inspections at 100% of the state tobacco retailers each year.

- c. Limitations in the state youth tobacco access laws

- d. Limited public support for enforcement of youth tobacco access laws

- e. Limitations on completeness/accuracy of list of tobacco outlets

- f. Limited expertise in survey methodology

- g. Laws/regulations limiting the use of minors in tobacco inspections

- h. Difficulties recruiting youth inspectors

- i. Issues regarding the balance of inspections conducted by youth inspectors age 15 and under

- j. Issues regarding the balance of inspections conducted by one gender of youth inspectors

- k. Geographic, demographic, and logistical considerations in conducting inspections

- l. Cultural factors (e.g., language barriers, young people purchasing for their elders)

- m. Issues regarding sources of tobacco under tribal jurisdiction

- n. Other challenges (*Please list.*)\_\_\_\_\_

## APPENDIX A: FORMS 1–5 TEMPLATES

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

Complete Form 1 in **Excel** 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 **Excel** form, provide the state name and reporting federal fiscal year (FFY 2020). 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 1 (Required for all states not using the Synar Survey Estimation System [SSES] to analyze the Synar Survey data.)**

<p style="text-align: center;"><b>Summary of Synar Inspection Results by Stratum</b></p>													
<p>State: _____</p>													
<p>FFY: 2020</p>													
(1)		(2)			(3)			(4)			(5)		
STRATUM		NUMBER OF OUTLETS IN SAMPLING FRAME			ESTIMATED NUMBER OF ELIGIBLE OUTLETS IN POPULATION			NUMBER OF OUTLETS INSPECTED			NO. OF OUTLETS FOUND IN VIOLATION DURING INSPECTIONS		
(a) Row #	(b) Stratum Name	(a) Over-the-Counter (OTC)	(b) Vending Machines (VM)	(c) Total Outlets (2a+2b)	(a) Over-the-Counter (OTC)	(b) Vending Machines (VM)	(c) Total Outlets (3a+3b)	(a) Over-the-Counter (OTC)	(b) Vending Machines (VM)	(c) Total Outlets (4a+4b)	(a) Over-the-Counter (OTC)	(b) Vending Machines (VM)	(c) Total Outlets (5a+5b)

**RECORD COLUMN TOTALS ON LAST LINE (LAST PAGE ONLY IF MULTIPLE PAGES ARE NEEDED).**

## FORM 2 (Optional)

### Appropriate for stratified simple or systematic random sampling designs.

Complete Form 2 in **Excel** 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 **Excel** form, provide the state name and reporting federal fiscal year (FFY 2020).

- 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: 2020
(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
<b>Total</b>										

- 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 in **Excel** 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 **Excel** form, provide the state name and reporting federal fiscal year (FFY 2020).

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.

<b>Summary of Clusters Created and Sampled</b>				
<b>State:</b> _____				
<b>FFY:</b> 2020 _____				
(1) Row #	(2) Stratum Name	(3) Number of PSUs Created	(4) Number of PSUs Selected	(5) Number of PSUs in the Final Sample
<b>Total</b>				

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

Complete Form 4 in **Excel** 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 **Excel** form, provide the state name and reporting federal fiscal year (FFY 2020).

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.”

<b>Inspection Tallies by Reason of Ineligibility or Noncompletion</b>			
		<b>State:</b> _____	
		<b>FFY:</b> 2020	
<b>(1) INELIGIBLE</b>		<b>(2) ELIGIBLE</b>	
<b>Reason for Ineligibility</b>	<b>(a) Counts</b>	<b>Reason for Noncompletion</b>	<b>(a) Counts</b>
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> )			
<b>Total</b>		<b>Total</b>	

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

Complete Form 5 in Excel 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 Excel form, provide the state name and reporting federal fiscal year (FFY 2020).

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 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.

<b>Synar Survey Inspector Characteristics</b>		
		<b>State:</b> _____
		<b>FFY:</b> 2020 _____
	(1) Attempted Buys	(2) Successful Buys
<b>Male</b>		
15 years		
16 years		
17 years		
18 years		
19 years		
20 years		
<b>Male Subtotal</b>		
<b>Female</b>		
15 years		
16 years		
17 years		
18 years		
19 years		
20 years		
<b>Female Subtotal</b>		
<b>Other</b>		
<b>Total</b>		

## **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) and respond to Question #10 of Appendix B to provide the requested information about sample size calculations for the Synar survey conducted in FFY 2019.

## APPENDIX B: SYNAR SURVEY SAMPLING METHODOLOGY

State: MA  
 FFY: 2020

**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

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

The sampling areas are the 351 cities and towns in Massachusetts or smaller subdivided areas within the large cities. These sampling areas are then broken down into zip codes to obtain smaller clusters. Every zip code in Massachusetts is in fact associated with one of the 351 cities and towns.

**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.) \_\_\_\_\_

If **Yes**, please indicate how likely it is that vending machines will be sampled.

- Vending machines are sampled separately to ensure vending machines are included in the sample
- Vending machines are sampled together with over the counter outlets, so it is possible that no vending machines were sampled, however they are included in the sampling frame and have a non-zero probability of selection
- Other reasons (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.

The 13 counties in Massachusetts were organized into five geographic regions of roughly equal size. The cities and towns in each region are further stratified into two groups according to whether or not the health department receives funding from the Massachusetts Tobacco Control Program (this funding status is updated every year). Thus, there are 10 strata.

**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.)

Clusters at the first stage are the sampling areas formed by the 351 cities and towns in Massachusetts. Before the random selection of sampling areas occurs, the 351 Massachusetts cities and towns are broken into applicable zip codes to obtain smaller sampling clusters.

**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.**

There are 10 fixed strata that we use in Massachusetts. These strata are based on geographic region and funding for the Board of Health Tobacco Programs. All 351 cities and towns in Massachusetts fall into one of the 10 strata and have an equal chance of being selected. Each city or town is grouped into the appropriate strata and broken into all applicable zip codes. The zip code is the final unit of sampling. Each zip code is assigned a random number generator, the zip codes within the strata are chosen sequentially until the estimated number of vendors represented by those zip codes exceeds the target number needed for that stratum. Thus, the number of clusters used within each stratum changes every year based on the number of retailers in each zip code that is selected. The data included for each outlet is from the most recent inspection completed during the inspection period. All zip codes within a stratum are eligible to be selected in the sample each year. Every outlet within a selected zip code is inspected. In both the funded and unfunded stratum included in the sample, the whole area covered by the zip code is completely canvassed and every outlet is inspected. Massachusetts refers to several lists contained in the MA RDMS and POST data systems. Web searches are conducted for possible additional retailers and a full canvas is done of the geographic area to determine if additional outlets are present. All outlets within selected zip codes are inspected. The state calculates sampling weights using the same method for funded and unfunded strata. The weights are calculated based on the percentage of the entire state population of 12-17 year olds that live in the strata based on census data. That percentage is converted to a decimal. The inverse of that decimal is the respective sampling weight that is used for the strata. This method of sampling weight calculation was developed with SAMHSA's assistance in 2005.

**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.

Ignoring the finite population correction, the effective sample size ( $n_e$ ) is determined by:

$$n_e = \frac{P(1-P)}{0.0182^2},$$

where  $P$  is the target retailer violation rate (20 percent). The target sample size ( $n_t$ ) is given by:

$$n_t = dn_e,$$

where  $d$  is the assumed design effect of 3.6. The original sample size ( $n_o$ ) is then obtained by:

$$n_o = (1+s)n_t,$$

where  $s$  is an incremental factor (or safety margin) of 35% to compensate for the loss of the sample during inspection.

10. Provide the following information about sample size calculations for the Synar survey conducted in FFY 2019.

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:

Frame Size:

**Input for Target Sample Size:**

Design Effect:

**Inputs for Original Sample Size:**

Safety Margin:

Accuracy (Eligibility) Rate:

Completion Rate:

- 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:**

--

- 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.**

Ignoring the finite population correction, the effective sample size ( $n_e$ ) is determined by:

$$484 = \frac{.2(1 - .2)}{0.0182^2},$$

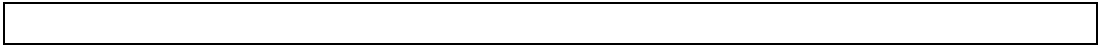
where  $P$  is the target retailer violation rate (20 percent). The target sample size ( $n_t$ ) is given by:

$$1742 = 3.6 \text{designeffect}(484),$$

where  $d$  is the assumed design effect of 3.6. The original sample size ( $n_o$ ) is then obtained by:

$$2352 = (1 + .35)1742$$

where  $s$  is an incremental factor (or safety margin) of 35% to compensate for the loss of the sample during inspection.



## APPENDIX C: SYNAR SURVEY INSPECTION PROTOCOL SUMMARY

State: MA

FFY: 2020

*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: Some youth are given stipends and some youth are volunteers)
- 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): MA Department of Public Health in conjunction with local boards of health, community agencies and the Massachusetts Association of Health

**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  
 Electronic Cigarettes/Electronic Nicotine Delivery Systems (ENDS)  
 Other

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

Depending on the location, the minor could ask for cigarettes, small cigars/cigarillos or ENDS/e-liquids. The minor is instructed to ask for the most commonly found and popular brands of each product. When asking for cigarettes, minors ask for Marlboro or Newport. Cigars/cigarillos requested are flavored Black & Mild, Phillies, Swisher Sweets or GAME if available. When requesting ENDS, minors typically request flavored JUUL, but they may also request VUSE, Blu, NJOY or MarkTen e-cigarettes or e-liquids if available. Approximately 50% of Synar checks will be for Marlboro or Newport cigarettes and approximately 50% of Synar checks will be for JUUL or small cigars/cigarillos, with a strong emphasis on JUUL.

**5a. Describe the methods used to recruit, select, and train adult supervisors.**

Adult supervisors for MTCP funded boards of health are the staff or consultants of the local funded Boards of Health. The adult supervisors are hired by the local municipalities or agencies using municipal hiring practices. FDA adult supervisors are recruited and selected following the guidelines provided by the Department of Public Health Human Resource Department.

The training for adult supervisors working with MTCP funded board of health programs includes 2.5 hours in conducting compliance checks and 1.5 hours in tobacco control inspections and enforcement. Youth access issues-especially related to enforcement-are discussed at program meetings during the year. DPH staff and attorneys from Mass Municipal Association or Mass Association of Health Boards are available as resources during these meetings. The adult supervisor training for board of health staff was updated in the fall of 2019. The training is conducted by a team of experienced professionals. New board of health inspectors shadow experienced inspectors prior to conducting inspections on their own. FDA adult supervisors take the required FDA inspector online training

(approximately 12 hours), along with a 1.5 hour in-person training. After trainings are completed, FDA inspectors shadow experienced FDA inspectors for several days before completing inspections on their own.

**5b. Describe the methods used to recruit, select, and train youth inspectors.**

A variety of youth recruitment strategies are used including making presentations at schools and local community-based organizations and working with community-service projects. Current youth inspectors receive referral bonuses for referring a friend or relative that works doing compliance checks. Recruitment is also done in conjunction with The 84. The 84 is a statewide movement of youth fighting tobacco in Massachusetts. Youth job opportunities are posted as a tab on the84.org website, and recruitment events happen at the annual 84 Youth Power Summits and at Kick Butts Day at the Massachusetts State House.

During the mandatory compliance check training for adult supervisors, the trainers review techniques for recruiting, screening and training youth inspectors.

Youth must take the required online minor training and pass the test before taking an in-person training. At the in-person training, youth inspectors learn about policies and practices that may be unique to the area where they are working and program that they are working with and discuss more details on how to conduct a compliance check. Youth also have an opportunity to look at and touch the products that they will be requesting and do several role plays practicing various scenarios that can occur during compliance checks. Prior to conducting compliance checks on their own, new youth observe experienced youth conducting checks so that they can become more comfortable with the job.

**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.)*

Minors are always accompanied by trained adult inspectors during compliance checks. If the adult or youth feels that an establishment is unsafe to enter to attempt a buy, the check is aborted. Parents are given descriptions of the protocols and their permission is obtained.

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.)*

Funded Boards of Health use Synar protocol and attend required trainings.

b. Procedural

Yes  No

*(If Yes, please describe.)*

MTCP requires that Boards of Health use the MTCP Compliance Check Protocol, which includes only using youth who are ages 16 or 17. All adult supervisors must attend a compliance check training organized by MTCP. All youth buyers must be trained before conducting checks. Minors must take online training and attend an in-person training with the local program working with them. The in-person training includes specifics about products to request and role plays to practice specific scenarios that may happen in the field.

# APPENDIX D: LIST SAMPLING FRAME COVERAGE STUDY

(LIST FRAME ONLY)

State: MA  
FFY: 2020

1. Calendar year of the coverage study: \_\_\_\_\_

2. a. Unweighted percent coverage found: \_\_\_\_\_%  
b. Weighted percent coverage found: \_\_\_\_\_%  
c. Number of outlets found through canvassing: \_\_\_\_\_  
d. Number of outlets matched on the list frame: \_\_\_\_\_

3. a. Describe how areas were defined. (e.g., census tracts, counties, etc.)

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

Yes  No

*If Yes, please explain.*

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.**

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

**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.*

**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.**

**11. Please provide the state's definition of "matches" or "mismatches" to the Synar sampling frame? (e.g., address, business name, business license number)**

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