# Counter Tools' Healthy POS Webinar Series: Flavored Tobacco Policies and Evaluation - A Massachusetts Case Study

Wednesday, February 26th, 2020 1:00pm EST

**Moderator:** Jackie Boards, Counter Tools

**Speakers:** Lindsay Kephart and Melody Kingsley, Epidemiologists, Tobacco Cessation and Prevention Program - Massachusetts Department of Public Health



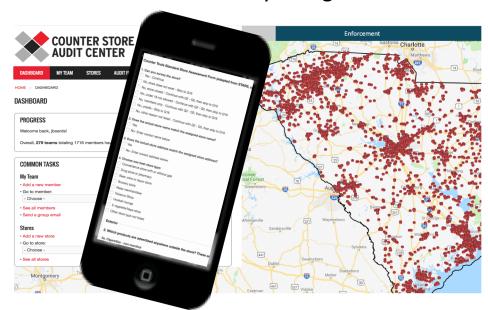
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**Empowering communities to become healthier places –** 

starting with the retail environment.

- Consulting
- Training
- Storytelling

- Providing Tech Tools
- Supporting Advocacy Efforts
- Disseminating Science and Best Practices

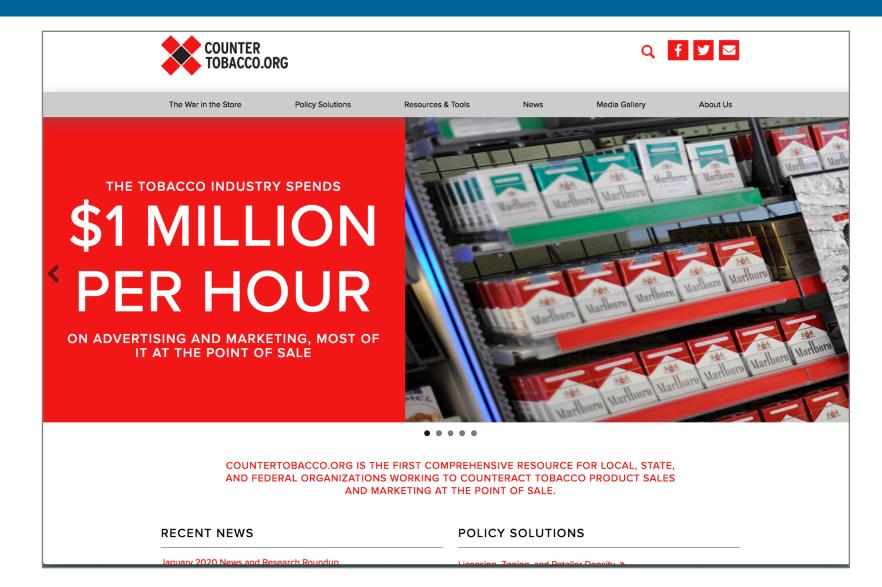






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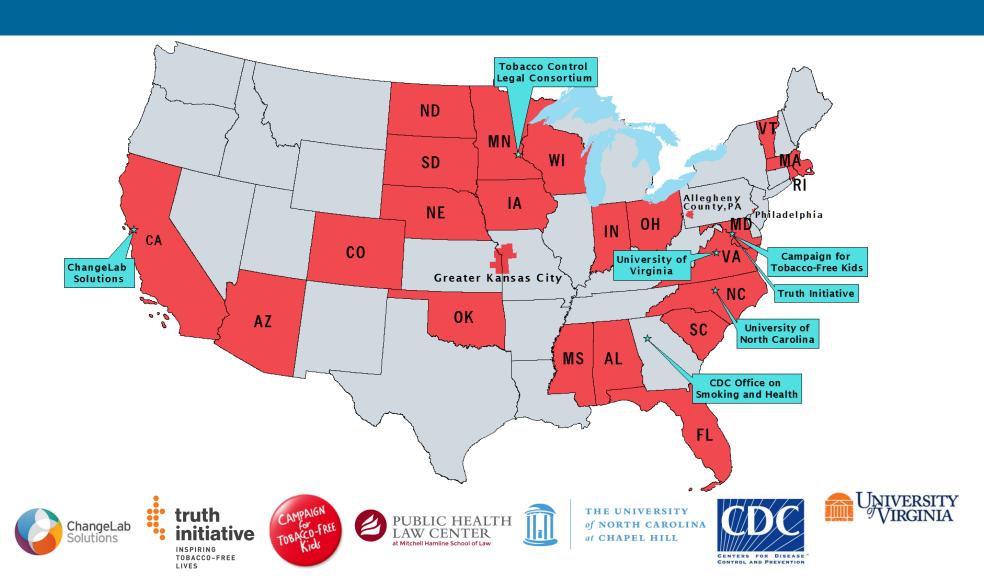


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### Massachusetts Department of Public Health

#### **Evaluation of Flavored Tobacco Restriction Policies**

Massachusetts Tobacco Cessation and Prevention Program (MTCP)

Massachusetts Department of Public Health

Counter Tools Healthy POS Webinar Series February 26, 2020

### **Outline**

**Background: Youth Tobacco Use and Point-of-Sale Policies** 

Data Sources for Evaluation of Flavored Tobacco Restrictions

Results from Evaluation of Flavored Tobacco Restrictions

- Retail tobacco environment
- Youth tobacco use

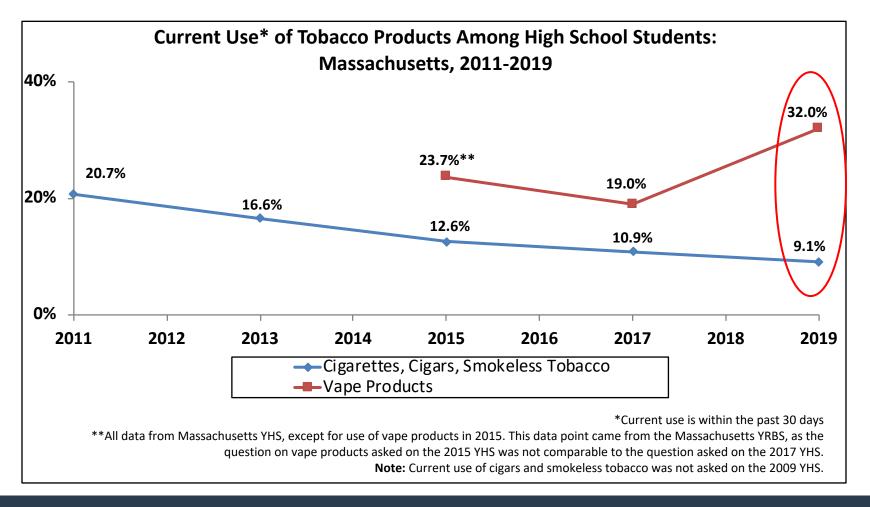
Next Steps: Focus on Equity and An Act Modernizing Tobacco Control

## Background

## Youth Tobacco Use is at an All-Time High

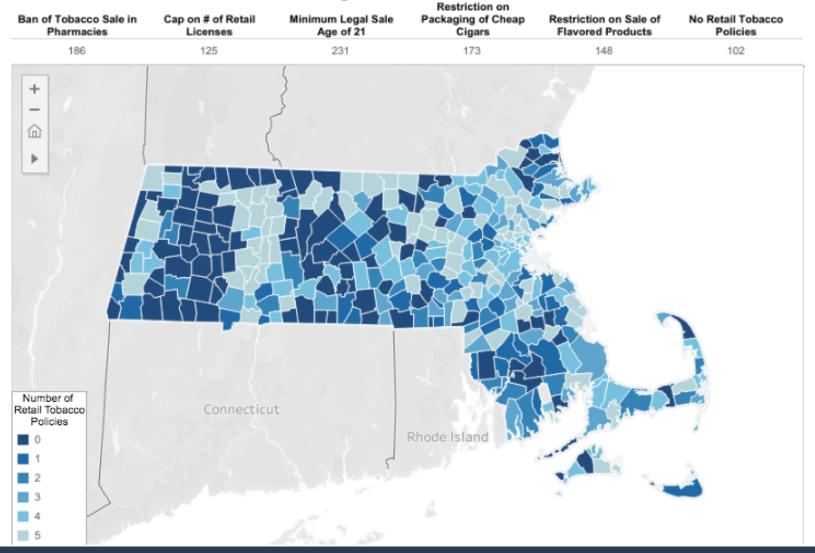
In 2019, over 1 in 3 high school students used a tobacco product (cigarettes, cigars, smokeless tobacco products, vape products) in the past 30 days. This is the highest rate of youth tobacco use in Massachusetts in two decades.

This dramatic increase in youth tobacco use has been driven by use of vape products. In 2019, youth used vape products at over 3x the rate of conventional tobacco.



## **Massachusetts Local Policy Movement**





### Massachusetts Municipality Structure

- Each municipality with Board of Health to pass local-level regulations and policies.
- Since 2003, municipalities have passed Point-of-Sale regulations impacting the local retail environment.
- Most municipalities require permit to sell tobacco.
- Permit system enables
   municipalities to regularly keep
   track of tobacco retailer info,
   conduct enforcement
   activities, and collect product
   and cost data.

## FTR: A High Impact Policy

Not all POS policies are created equal. Some tobacco point-of-sale policies impact more than one tactic; these are considered higherimpact policies.

Flavored tobacco restrictions (FTRs) are a higher impact policy because they impact three tactics.

		Point-of-Sale Policies							
Tobacco Industry Tactics	Strategy to Reduce Tobacco Industry Influence	Flavored Product Restriction	Cap on Number of Retailers	Cigar Packaging Restriction	Pharmacy Ban	No New Retailers 500ft from Schools	E-cigarette Age Restriction	21 Age Restriction	Coupon Restriction & Out of Package Sale Ban
Density Tactic: Makes tobacco available in numerous locations to normalize its sale and increase young peoples' exposure.	Density Strategy: Reduces the number or location of retail outlets.		✓		<b>✓</b>	<b>✓</b>			
Pricing Tactic: Makes tobacco inexpensive so it is easier for young people to buy it, and to try it on impulse.	Pricing Strategy: Increases the cost of tobacco products.			✓					✓
Exposure Tactic: Uses product displays and indoor and outdoor marketing to expose young people to tobacco industry messages.	Exposure Strategy: Reduces the types of products youth are exposed to in their communities.	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>			
Access tactic: Makes tobacco easy for young people to get.	Access Strategy: Reduces the channels in which youth may access tobacco.	<b>✓</b>					<b>✓</b>	<b>✓</b>	
Flavor Tactic: Makes products sweet to mask tobacco taste, and uses a variety of youth-centered flavors for wider appeal.	Flavor Strategy: Reduces exposure and access to flavored products, which are targeted at youth.	<b>✓</b>							

## **Data Sources for FTR Evaluation**

## Types of Data Used for Flavor Evaluation

#### **Ongoing**

#### **Pricing Survey**

- <u>Tracks availability and price of select flavored and non-flavored tobacco products, including cigarettes, cigars, smokeless, and vape products</u>
- Conducted in 100% retailers every year

#### **Full Inventories of Flavored Tobacco Products**

- Assessed flavor product availability, flavor product inventory, flavor product advertising, barriers to compliance, helpful resources
- Conducted in select communities during first CDC Competitive Grant period

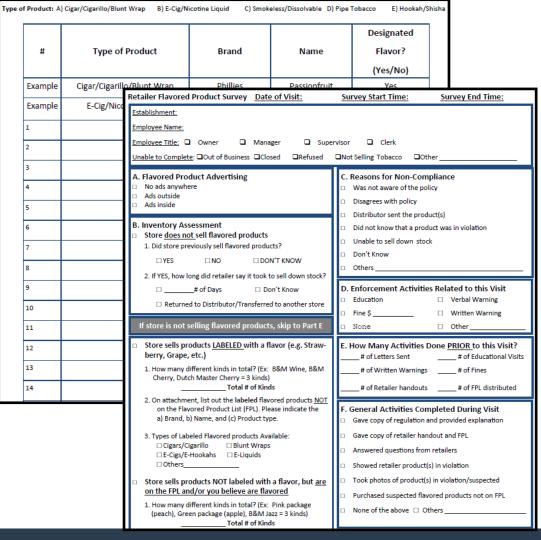
## Intensive Data Collection

#### **Youth Tobacco Surveys**

- Assessed ever and current flavored and non-flavored tobacco use, awareness of tobacco, marijuana use, and access to tobacco (2016 and 2018-2019)
- Conducted in select communities during first and second CDC Competitive Grant periods

## Intensive Data Collection (as resources permit)

#### **Retail Surveys**



#### **School Surveys**

		1			
9. Does anyone you live with currently use tobacco (for exa	mple, cigarettes, cigars, e-cigarettes, chew, dip, snus, pipe to	bacco,			
etc.)? A. Yes B. No	C. Don't know				
10. For each NON-FLAVORED tobacco product	halann ulasaa ahaali 🗖 ifuun hana maad ib ab lasab anaa				
Please also check V if y	12. What is the price of a multi-pack of cigars (2 or more) like t	this 13. What is the price of a single cigar (1) like this in			
(If you have never used the pro	in Attleboro? Middleonis	Attleboro?			
(ii you have never used the pro	A. I don't know	A. I don't know			
(Non-flavors include: plain, tobacco, regular, mentho	B. \$1 or less	B. \$1 or less			
	C. \$2.50	C. \$2.50			
Non-flavored cigarette	D. \$5.00	D. \$5.00			
Non-flavored cigar or cigarillo	E. \$8.25	E. \$8.25			
Non-flavored e-cigarette, e-hookah, e-pen or vape pen	F. \$10	F.\$10			
	14. Do you know someone who would buy tobacco products				
Non-flavored blunt or blunt wraps	for you if you asked?	ONLY ANSWER IF YOU KNOW SOMEONE WHO WOULD BUY TOBACCO PRODUCTS FOR YOU			
Non-flavored smokeless tobacco that is chewed, sniffed, or	A. Yes	14(a). How old is this person? (Select ALL that apply if you know more			
mouth	B. No	than one person you could ask)			
11. For each FLAVORED tobacco product be	C. Don't know	Under 18 18—20 21-25 26+ Don't know			
Please also check  if y					
(If you have never used the pro		ence stores, corner stores, or gas station/mini-marts in <u>Attleboro</u> in			
(ii you have hever used the pro	the past <u>3 montais</u> :				
(Flavors include: grape, cherry, watermelon, berry, v	A. Single Black & Mild cigar	B. Single flavored BluntVille cigar			
red, tropical crush, caramel, honey, banana, e	DOMESTIC STATE				
Flavored cigarette	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
Flavored cigar or cigarillo	160 TO				
Flavored e-cigarette, e-hookah, e-pen or vape pen	3 Egy				
	Ser Line				
Flavored blunt or blunt wraps	JAZZ				
Flavored smokeless tobacco that is chewed, sniffed, or held	Yes, I have seen these products	Yes, I have seen these products			
	No, I have not seen these products	No, I have not seen these products			
	C. Multi-pack flavored Show cigars	D. Flavorad a liquide			
	C. Willti-pack flavored show cigars	D. Flavored e-liquids			
	5 5 5 5 5 5 8 S				
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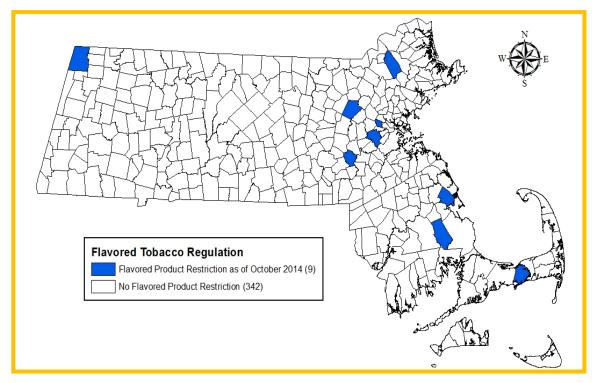
### Origins of the Flavor Tobacco Restriction (FTR) in Massachusetts

In **January 2012**, Providence, RI passed an ordinance prohibiting the sale of all flavored tobacco products, including e-cigs, excluding menthol, in youth-accessible retailers. Ordinance successfully litigated.

Prohibits sale of flavored tobacco products except in adult-only retail tobacco stores

- \*Flavored: Taste or aroma other than mint, menthol or tobacco
- ❖ Tobacco Products: Includes e-cigarettes, e-liquids, hookah, shisha, blunt wraps, regardless of nicotine content
- \*Adult-only Retail Tobacco Stores: 1) do not allow anyone under the minimum legal sale age to enter 2) do not hold a food service permit and 3) are licensed as such by the municipality

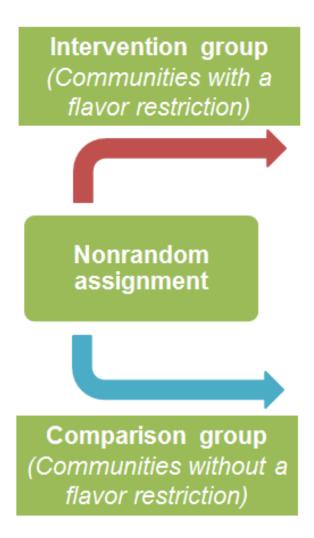
## Origin of the FTR Evaluation



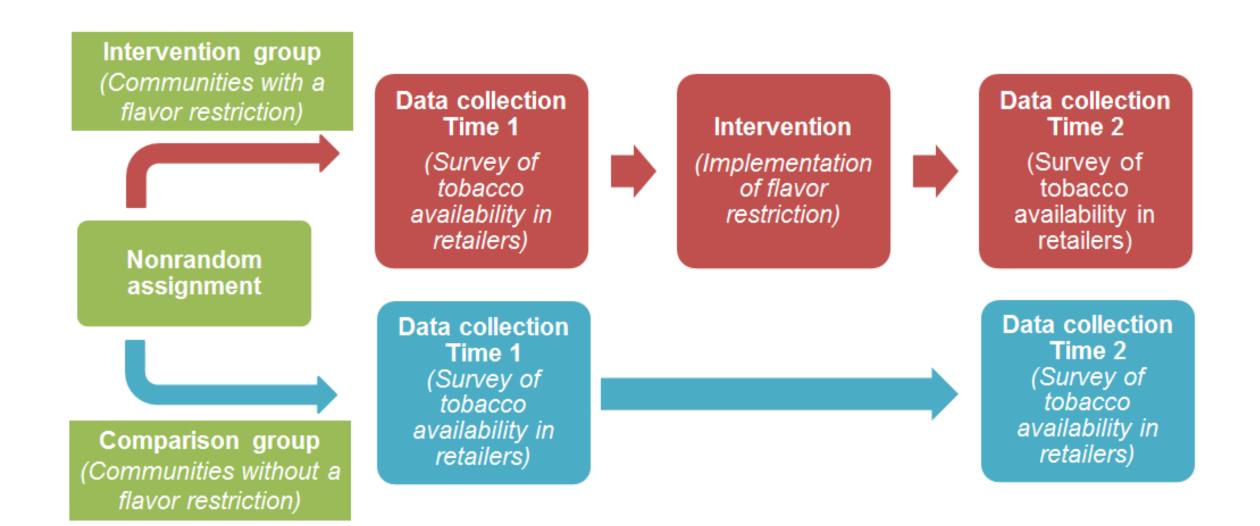
- In 2014, New York City, Providence, RI, and 9 municipalities in Massachusetts had already adopted a flavor restriction policy.
- Many more localities were looking to pass it in the near future.

- At the time, no prior publication on the impact of the policy had been released
- In 2014, Massachusetts applied for and was awarded a CDC Competitive grant, which supports designing, implementing and evaluating innovative and/or promising practices.
- Massachusetts proposed to evaluate the impact of a flavored tobacco restriction policy that removed the sale of these youth-oriented products from youth accessible retail settings into adult-only establishments.
  - Impact on the retail environment (availability and advertising)
  - Impact on **youth access, initiation, and use** of flavored products

## Policy Evaluation Methods: Quasi-Experimental Design



## Policy Evaluation Methods: Quasi-Experimental Design



## Retailer Compliance with Flavored Tobacco Restrictions

## Study #1: With adequate enforcement, compliance to local FTR policies can be high, regardless of community demographics

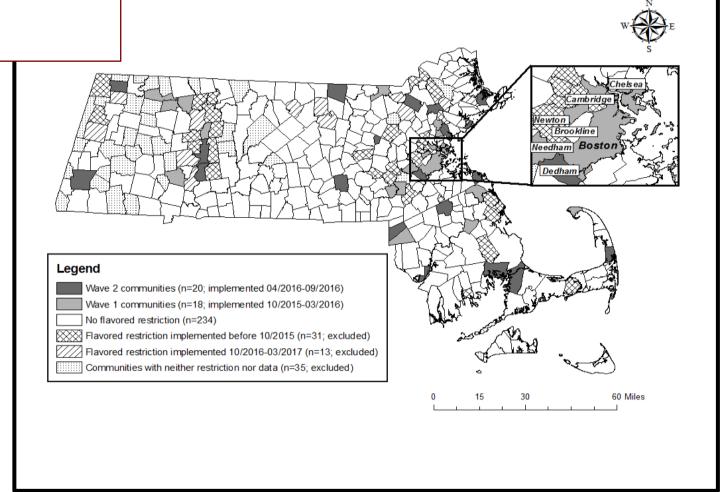
Impact of flavoured tobacco restriction policies on flavoured product availability in Massachusetts

Melody Kingsley, Glory Song, Jennifer Robertson, Patricia Henley, W W Sanouri Ursprung

#### Case communities:

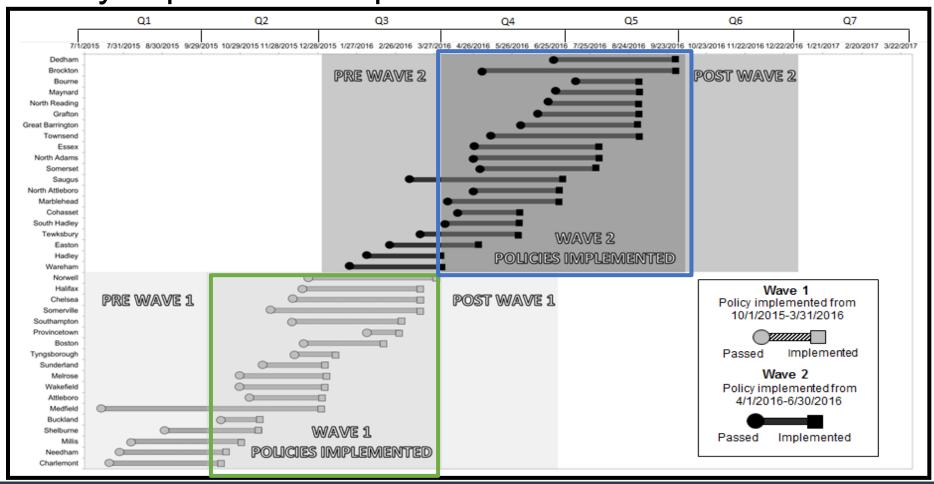
38 with the policy (grouped into 2 waves based on date of policy implementation)

Comparison communities: 234 without the policy



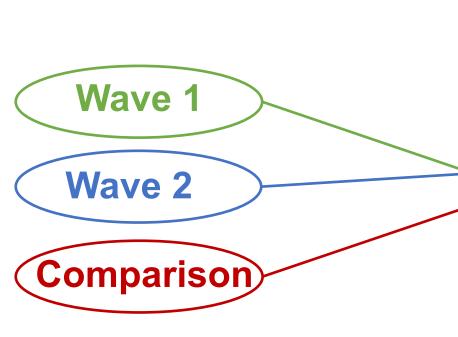
## Study #1: Methods

- Wave 1: Policy implemented October 2015 March 2016
- Wave 2: Policy implemented April June 2016

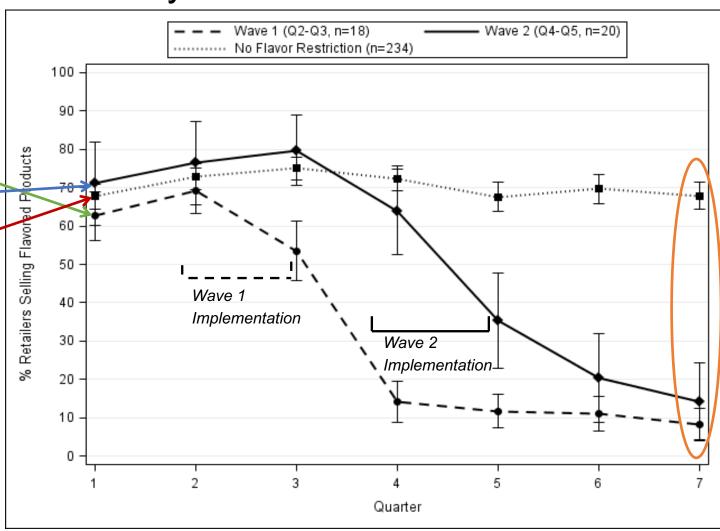


## Study #1: Results

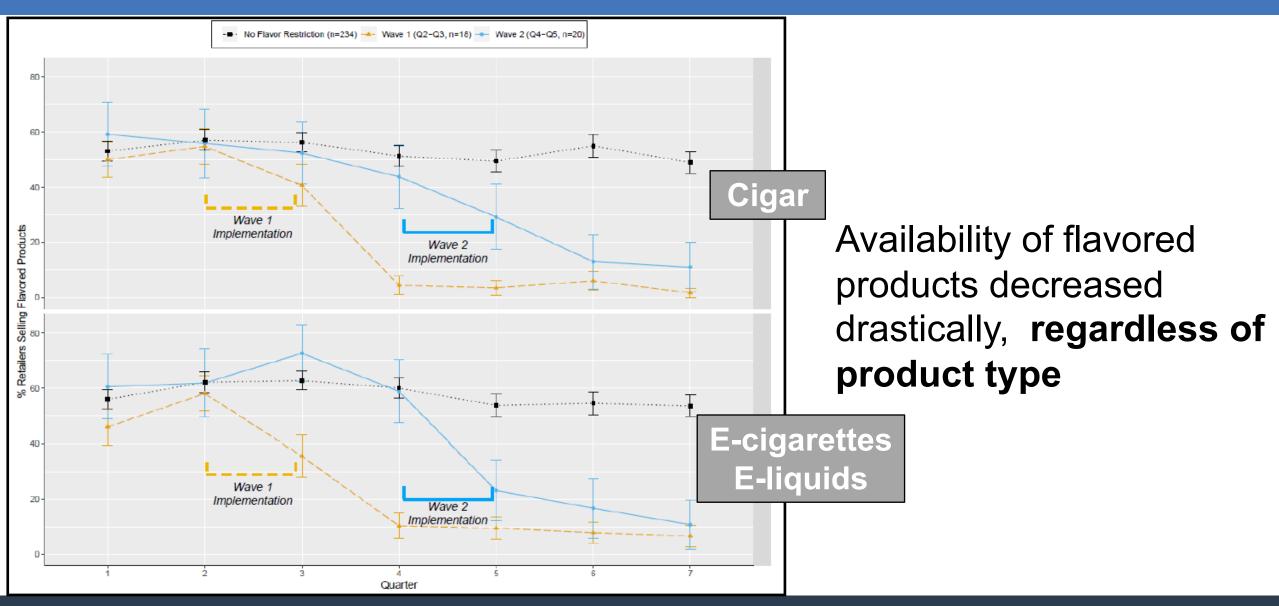
#### **Outcome:** Flavored product availability over time



By Q7, both Wave 1 and Wave 2 had flavored product availability under **15%**, while comparison communities had significantly higher availability (68%)



## Study #1: Results



## **Study #1: Conclusions**



Within a short (12 month) period of time:

- **Drastic reductions** occurred in **all types** of flavored tobacco captured (cigars, e-cigarettes, e-liquid droppers)
- Reductions occurred regardless of time of policy implementation (early or later adopters)
- Reductions occurred regardless of community and retailer level characteristics.



Compliance with the policies was aided by MTCP's enforcement infrastructure and resources that were provided to enforcement agents across the state. Includes:

- Multiple enforcement trainings
- Educational visits and materials for retailers
- Flavored product list with all known flavored products.

## Study #2: Local FTR policies drastically reduces flavor product advertising and inventory in the retail environment

Evaluating tobacco retailer experience and compliance with a flavoured tobacco product restriction in Boston, Massachusetts: impact on product availability, advertisement and consumer demand

Lindsay Kephart <sup>(i)</sup>, <sup>1</sup> Claude Setodji, <sup>2</sup> Joseph Pane, <sup>2</sup> William Shadel, <sup>2</sup> Glory Song, <sup>3</sup> Jennifer Robertson, <sup>3</sup> Nikysha Harding, <sup>4</sup> Patricia Henley, <sup>5</sup> Wannakuwatte Waduge Sanouri Ursprung <sup>1</sup>

All pre-post changes significant (P < 0.001)

% Selling flavored products

Average # of products

% retailers with flavor ads

ANALYTIC SAMPLE (N = 353 RETAILERS)				
BASELINE	FOLLOW-UP			
100%	14.4%			
19.1	0.39			
54.5%	25.8%			

#### Of retailers not compliant at follow-up (n=51)

Average # of flavored products: 3

45% (N=23) selling only one product

144 products inventoried at follow-up

- 85.4% were cigars/cigarillos/blunt wraps
- 11.8% were e-cigarettes/e-liquids

#### Top flavors:

- Blue (14.6%)
- Vanilla (11.8%)

- Grape (8.3%)
- Chocolate (6.9%)

## **Study #2: Conclusions**

- Prior to implementation of FTPR, flavored tobacco products (particularly cigars/cigarillos/blunt wraps and e-cigarettes/e-liquids) were *widely* available in youth accessible stores.
  - 400+ unique flavors documented
  - Most common flavors: grape, vanilla, blue, chocolate and wine
- Flavored tobacco product restriction in Boston lead to a decrease in flavored product availability and advertisements in youthaccessible stores
- Educational and Enforcement infrastructure in Boston aided with retailer knowledge and compliance
- Concept flavors may pose a challenge to compliance.
- Mint/menthol flavors still available in youth-accessible retailers.

#### Full paper available at:

http://tobaccocontrol.bmj.com/cgi/contezznt/full/tobaccocontrol-2019-055124

#### **Co-author Acknowledgements:**

- Claude Setodji
- Joe Pane
- Bill Shadel
- Glory Song
- Jennifer Robertson
- Nikysha Harding
- Patti Henley
- Sanouri Ursprung

## Impact of Flavored Tobacco Restrictions on Youth Tobacco Use

## Study #3: Local FTR policies can reduce youth use of flavored and non-flavored tobacco in the short-term (6 months – 1 year)

Short-Term Impact of a Flavored Tobacco Restriction: Changes in Youth Tobacco Use in a Massachusetts Community



Melody Kingsley, MPH,<sup>1</sup> Claude M. Setodji, PhD,<sup>2</sup> Joseph D. Pane, MSP,<sup>2</sup> William G. Shadel, PhD,<sup>2</sup> Glory Song, MPH,<sup>1</sup> Jennifer Robertson, JD,<sup>1</sup> Lindsay Kephart, MPH,<sup>1</sup> Patricia Henley, MEd,<sup>1</sup> W. W. Sanouri Ursprung, PhD<sup>1</sup>

A Massachusetts community with the policy was matched to a similar community without the policy on demographics, retailer characteristics, and presence of other point-of-sale tobacco control policies.

#### Data Collection (2016-2017)

Baseline: pre-policy implementation

Follow-up: 6 months post-policy implementation

Case Community



**118** retailer inventories

**113** retailer inventories

**593** youth surveys

**524** youth surveys

**Comparison Community** 



**51** retailer inventories

**48** retailer inventories

**636** youth surveys

**646** youth surveys

## Study #3: Results

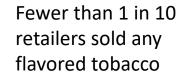
From baseline to 6 months post-policy implementation:

#### **Retail Environment**

Case Community

More than 7 in 10 retailers sold any flavored tobacco





**Comparison Community** 

More than 7 in 10 retailers sold any flavored tobacco





More than 7 in 10 retailers sold any flavored tobacco

#### **Youth Tobacco Use**

**Case Community** 

Ever and current use of BOTH flavored and non-flavored tobacco products

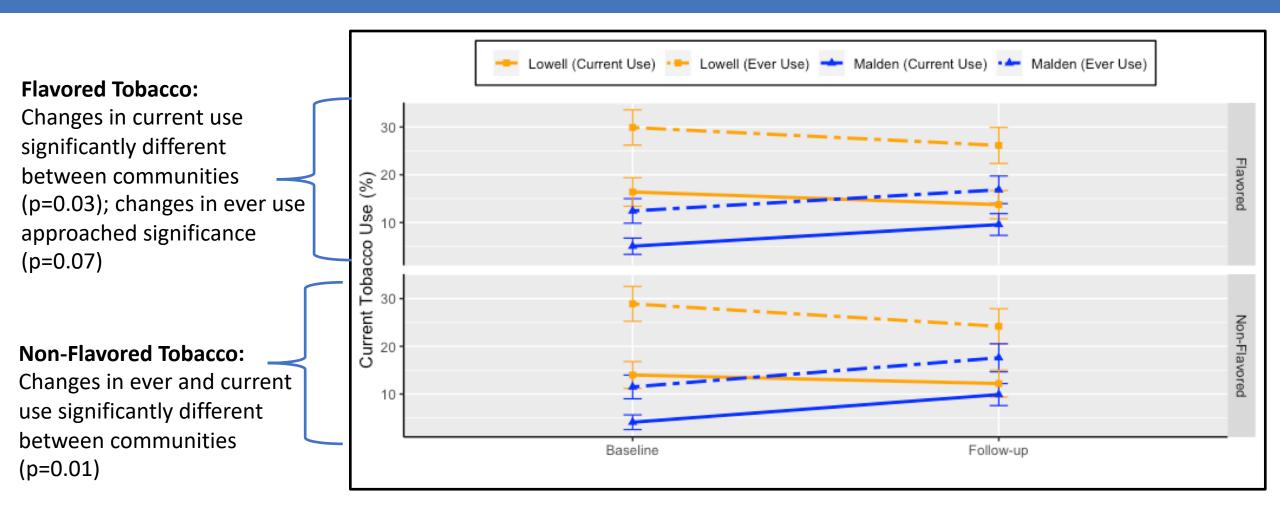
decreased

increased

**Comparison Community** 

Ever and current use of flavored and non-flavored tobacco products

## Study #3: Results



Difference-in-difference models adjusted for age, gender, and race/ethnicity

## **Study #3: Conclusions**

## Implementation of a flavored tobacco restriction in Massachusetts' communities:

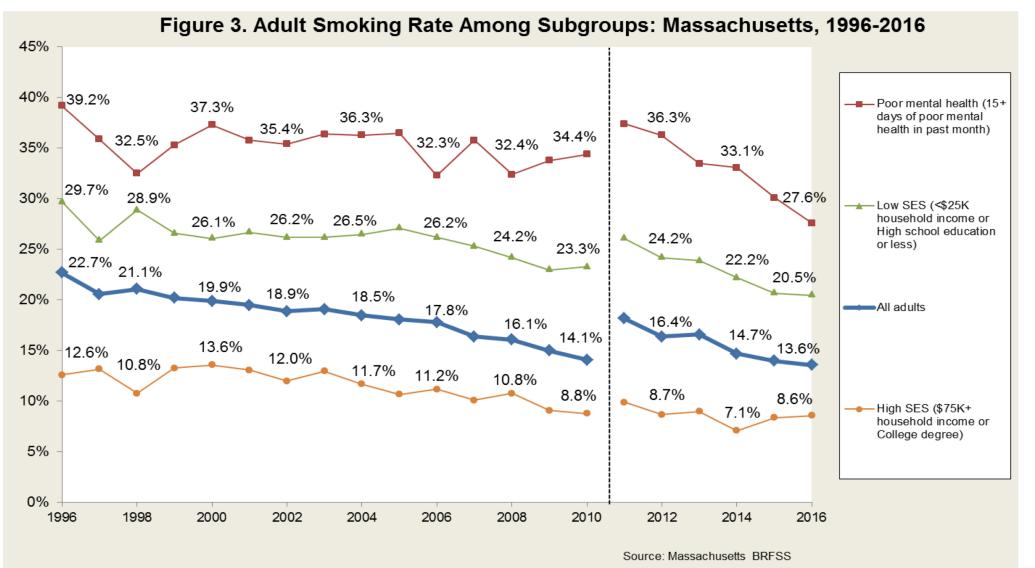
- Decreased availability of flavored tobacco products
- **Decreased use** of both flavored and non-flavored tobacco products among youth (even after controlling for youth demographic characteristics), even within 6 months
- **Did not** necessarily drive youth to switch to non-flavored tobacco
- **Did not** impact initiation of tobacco use with a flavored product **in the short-term**; future studies could assess longer-term impact of the policy on this outcome



## Study #4: Local FTR policies can sustain reduction in youth use of flavored tobacco in the long-term (2-3 years)\*

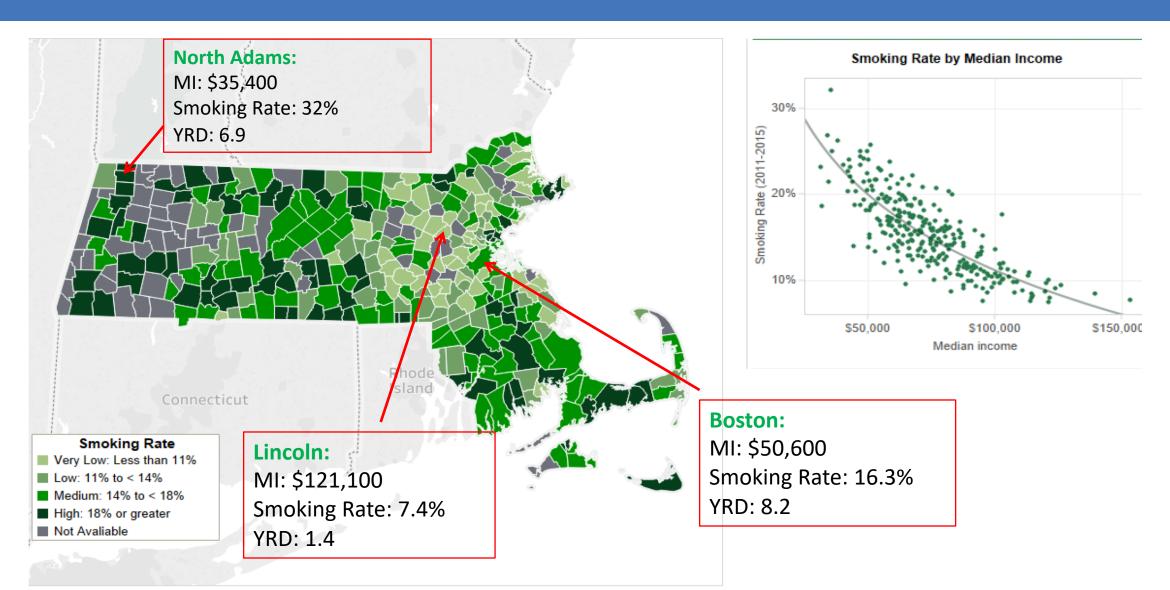
\*Coming soon....

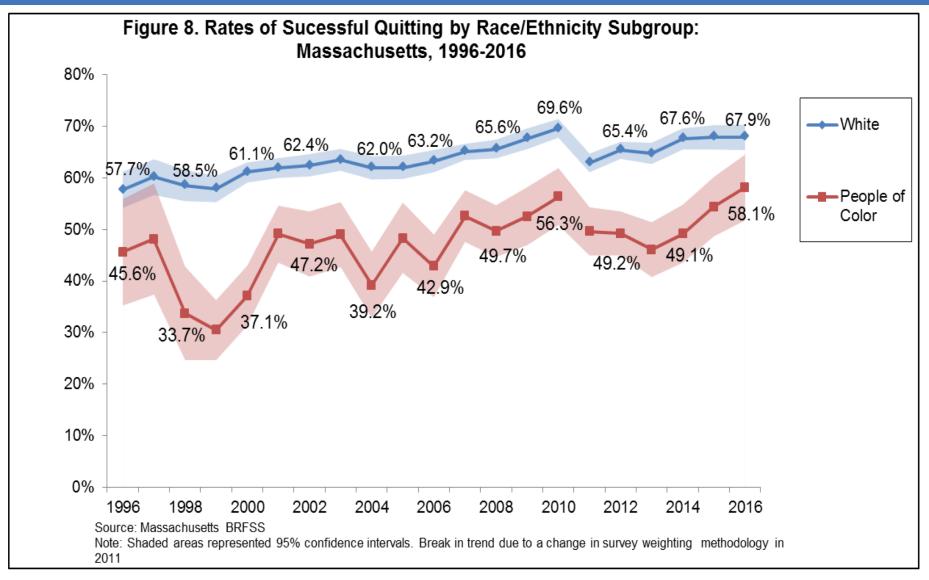
## **Focus on Equity**



Despite remarkable progress in reducing tobacco use overall, certain populations continue to be disproportionately impacted by tobacco use and face barriers to quitting.

- With disabilities
- Low education
- Low income
- Poor mental health
- LGBTQ
- People of color (blacks and Hispanics)





Despite having similar rates of smoking compared to Whites, blacks and Hispanics consistently have lower rates of successful quitting, even after adjusting for income.

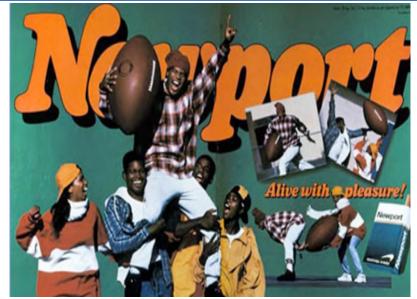
Why are there racial inequities in cessation?

- Access to and quality of health care, cessation resources.
- Increased exposure to ads, retail density, SHS
- Socio-economic stressors due to low education, low income, job instability
- Less family and social support
- Experiences of discrimination and racism

Tobacco-Related Risk Stressors Behaviors and Stigma Other systems of discrimination based on gender, Environmental Discrimination Exposures disability, etc. Tobacco-Related Structural Racism Institutional Smoking and Tobacco Use Morbidity and Quitting Behavior and Global Secondhand Smoke Mortality Systems-Diabetes Social, Environmental, Level Asthma and Economic Drivers COPD Schools Stroke Conditions Businesses Cardiova scular Disease **Built Environment** Lung Cancer Housing Housing Co-occurring Other Cancers Financial and Work Health Risk Behaviors Early mortality Environment Alcohol and Substance Use Social Environment Nutrition Access to Health Care Physical Activity

Figure 1. Conceptual Framework Explaining Tobacco-Related Inequities

### Menthol Cigarettes: An Equity Issue

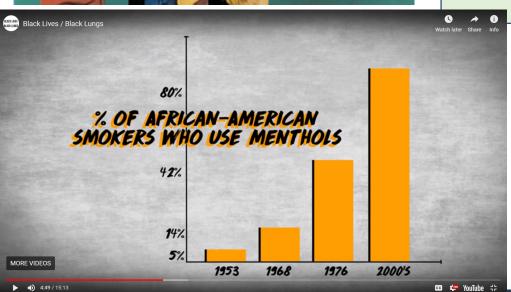


Research shows inequities in menthol cigarette exposure among communities of color including more availability and advertisement, and lower pricing in Massachusetts.

2002 study looked at tobacco availability and POS marketing in demographically contrasting MA neighborhoods.

Found 29% of total tobacco ads were for menthol in minority neighborhoods compared to **10%** of ads in non-minority neighborhoods.

2010 study looked storefront cigarette advertising in Dorchester and Brookline. Dorchester had significantly more menthol ads than Brookline [54% vs 18% (P<0.001)] Prices appeared to be, on average, 36 cents cheaper in Dorchester.



Tobacco industry documents reveal the deliberate targeting of **menthol** to women, LGBT population, low-income communities and communities of color.

#### The tobacco industry targeted Black Americans through:

- Targeted magazine advertisements
- **Event sponsorships**
- Provision of funding for Black organizations.
- Free samples of menthol products in black communities.

### Examining menthol cigarette pricing practices in Boston

The association between neighborhood racial composition and menthol cigarette pricing in Boston, MA

Lindsay Kephart<sup>a,\*</sup>, Glory Song<sup>a</sup>, Patricia Henley<sup>b</sup>, W.W. Sanouri Ursprung<sup>a</sup>

#### **RESEARCH QUESTIONS**

Is there a relationship between the proportion of black residents in a block group and the price of menthol cigarettes?

Is there a relationship between % black in a block group and the percent of retailers selling menthol cigarettes 25 cents or more below the established minimum price?

Need to control for other block group characteristics and variables that affect retailer behavior

Compare menthol brand to models featuring non-menthol brands

#### **FY16 BOSTON PRICING SURVEY**



AVAILABILITY: Do stores carry brands?

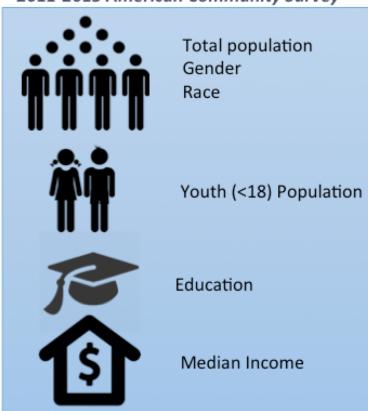
PRICING: Price per pack (pre-tax)

MINIMUM PRICING: What percent of stores are selling below minimum price?

TYPE: Chain vs Independent

LOCATION: Where is the retailer located?

#### 2011-2015 American Community Survey



Use of ARCGIS mapping software to link data spatially

### Examining menthol cigarette pricing practices in Boston

#### **RESULTS**



For every 10 percentage point increase in % black residents in a block group,

The average price of Newport cigarettes decreases by 3 cents.\*

There was no relationship between % black and the average price of Marlboro and Camel cigarettes.



There was a <u>19 percentage point increase</u> in the percent of retailers selling Newport cigarettes 25 cents or more below minimum price.\*

\*(p<0.01)

There was no relationship between % black and the % of retailers selling 25 cents or more below minimum price for the other three brands: Marlboro, Camel and Pall Mall.

#### **IMPLICATIONS**

- Significant finding for Newport, an expensive brand. A bigger effect size may be present for cheaper menthol cigarette brands.
- Higher prices may reduce not only a single youth's propensity to smoke, but their peers as well.
  - Lower prices may make these products more accessible to youth.
- Lower menthol prices might be considered the "norm" alongside advertisements and peer/family use.
  - All these factors might impact someone's decision to initiate and continue to use menthol products.
- There is evidence of tobacco industry targeting of menthol cigarettes through advertisements and lower pricing strategies.

Historical targeting, current day industry strategies, and peer normalization create an environment where black residents are disproportionately exposed to menthol cigarettes, which can lead to higher use rates and worse health outcomes.

## AN ACT MODERNIZING TOBACCO CONTROL

#### Law Overview - An Act Modernizing Tobacco Control

- On November 27, 2019, Governor Baker signed into law An Act Modernizing Tobacco Control ("Act"), which provides DPH with additional regulatory authority to regulate ALL flavored (including menthol) tobacco products and electronic nicotine delivery systems (ENDS)
- Effective immediately, the new law places the following restrictions:
  - Retail stores licensed to sell tobacco products, such as convenience stores, gas stations, and other retail outlets, are restricted to the sale of non-flavored nicotine products with a nicotine content of 35 milligrams per milliliter or less
  - The sale of non-flavored nicotine vaping products (with a nicotine content over 35 milligrams per milliliter) is restricted to licensed, adult-only retail tobacco stores and smoking bars
  - > The sale and consumption of all flavored nicotine vaping products may only occur within licensed smoking bars
- Effective June 2020, the new law places the following restrictions:
  - The sale of ALL flavored (including menthol) combustible cigarettes, cigars, and chewing tobacco will be restricted to licensed smoking bars where they may be sold only for on-site consumption
  - > Retailers will not be able to **advertise** tobacco products that they do not actually carry (eliminate flavor product ads + reduce vape ads)
  - > A 75 percent excise tax on the wholesale price of nicotine vaping products, in addition to the state's 6.75 percent sales tax will be imposed
  - Requires private insurers, the Group Insurance Commission, & MassHealth to provide coverage for tobacco use cessation counseling and all generic FDA approved tobacco cessation products with at least 1 product available @ no out of pocket costs.



## THANK YOU QUESTIONS?

**Melody Kingsley** 

Melody.Kingsley@state.ma.us

**Lindsay Kephart** 

Lindsay.Kephart@state.ma.us

