

Tobacco Product Availability Following Point-of-Sale Policy Implementation in Rhode Island

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The substantial decline in cigarette smoking among adolescents is a notable public health achievement. The smoking rate among Rhode Island (RI) high school students fell to a record low of 6.1% in 2017, down 83% since peaking at 35.4% in 1997.¹ This decline, however, is threatened by recent increases in adolescents' use of alternative tobacco products, such as e-cigarettes and cigars, with kid-friendly flavors. In 2014, there were more than 7,700 unique e-cigarette flavors on the U.S. market with new flavors being added each month.² Flavored cigars made up more than half of the U.S. cigar market (52.1%) in 2015.³ While some flavored tobacco products are clearly labeled on their packaging, many products have flavors that do not explicitly reference the flavor used.⁴ Flavored tobacco products are readily available in convenience stores – a public setting frequented by most teenagers at least once a week.⁵ Today 20% of RI youth use e-cigarettes and 7% smoke cigar/cigarillos.¹

Point of sale (POS) refers to any location where tobacco products are displayed, advertised, and purchased. In 2016, a two-year Centers of Disease and Control (CDC) grant awarded to the RI Department of Health (RIDOH) provided funding to six RI municipalities to implement and enforce the RI Model Tobacco Policy (RIMTP) at retail POS. The policy restricts the sale of flavored tobacco products, except in smoking bars, prohibits the redemption of coupons or other price discounting strategies to sell tobacco, and requires tobacco retailers to obtain a local license in addition to the state license. Fees from licensing are used to support enforcement checks conducted by local police, with an escalating fine schedule up to tobacco license revocation.⁶ **Table 1** provides a summary of the policies passed by the funded municipalities: Barrington, Central Falls, Johnston, Providence, West Warwick and Woonsocket. While not funded, the RIDOH Tobacco Control Program partnered with the town of Middletown to monitor the availability and sales of flavored tobacco and price discounting available at POS. RI tobacco laws prohibit the purchase, sale or delivery of tobacco products to persons under age 18. Establishments are required to post signs stating that the sale of tobacco products to minors is prohibited (RI Gen L 11-9-13).⁷ Two cities in RI, Barrington and Central Falls, have raised the minimum legal age to purchase tobacco products to 21. Central Falls was the first city in RI to do so. The RI Superior Court, however, ruled that the town of Barrington lacked authority to

Table 1. Municipality Versions of the RI Model Tobacco Policy (RIMTP)

City/Town	Policy	Date passed	Status
Barrington	RIMTP (Policy excludes retail licensing. Minimum tobacco sale age raised to 21)	June 2017 (Revised November 2017)	On Hold: Litigation
Central Falls	RIMTP (Policy excludes retail licensing. Minimum tobacco sale age raised to 21)	November 2015	Active
Johnston	RIMTP	June 2017	On Hold: Litigation
Providence	RIMTP	January 2012 (Implemented January 2013)	Active
Middletown	RIMTP	June 2017 (Revised December 2017)	Null & Void
West Warwick	Limited RIMTP (All tobacco products must be behind the sales counter. There are no restrictions on price discounting and coupons.)	February 2017 (Revised: June 2018 & July 2017)	Active
Woonsocket	Limited RIMTP (All flavored tobacco products must be behind the sales counter. There are no restrictions on price discounting and coupons.)	November 2017 (Revised June 2017)	Active

pass its tobacco ordinance,⁸ which is likely to be appealed.

This paper measures implementation of retail store observational surveys necessary for evaluating the tobacco landscape in seven RI municipalities with a POS tobacco policy. To our knowledge, this is the first study to evaluate the tobacco landscape in the context of litigation to pre-empt localities from enforcing POS tobacco policies.

METHODS

Data are from the Standardized Tobacco Assessment for Retail Settings (STARS) surveillance tool adapted for RI. RI-STARS was designed to measure the observed availability of tobacco products, their placement, promotion, and price at retail POS. A measure of clearly-labeled flavored products was created by combining five binary variables that asked if a store carried either cigarillos, large cigars, chew, e-cigarettes, or e-liquids that were clearly marked with a flavor. Mint, menthol, and wintergreen were not considered flavors, but any fruit or candy flavors were included. The variable for not-clearly-labeled flavored products was created from a question on the observed availability of Garcia y Vega Game Blue (Game Blue). These cigarillos are known to be vanilla flavored but labeled as "Blue." If a store had any flavored products, regardless of labeling, it was marked as selling flavored tobacco products. Price discounts were measured using a combination of two variables; availability of Buy-One-Get-One discounts and coupon redemptions in the store.

RI-STARS was administered by community partners in the seven municipalities cited above. Each municipality completed four rounds of store observations over 18 months (2017-2019; **Table 2**). Community partners were provided with a tobacco and e-cigarette retail license store list generated by the RI Department of Revenue Division of Taxation. All local tobacco retail stores were visited in each round except in the City of Providence. Providence has an estimated 300 tobacco retail stores. As such, 100 stores were randomly selected for each of four rounds of RI-STARS. Each new sample drawn excluded stores that had not violated the city's POS tobacco policy in the prior round. This ensured that all stores were surveyed at least once during four rounds of data collection. Permanently closed stores were removed from the retailer list and new stores were integrated in subsequent rounds of data collection.

Community partners provided retailer education at each store visit, shared materials that explained the RIMTP, and

offered retailers clear guidelines for compliance with the policy. RI-STARS was an observational survey only and was separate from enforcement. A store could not receive a fine or penalty for being observed to have a flavored tobacco product, even if the sale of the product was restricted in the local policy.

RESULTS

Observed availability of flavored tobacco products decreased slightly across the seven municipalities, except for the town of Johnston. This change was largely driven by a change in the number of not-clearly-labeled flavored products available. In round one, community partners found a nearly equal number of stores selling clearly-labeled flavored products as selling not-clearly labeled tobacco products. By round 4, some of the cities and towns observed fewer not-clearly labeled products in stores, but the availability of clearly labeled flavored tobacco products showed little change. The decrease in the availability of tobacco products that did not explicitly identify a flavor can be attributed, in part, to the results from the RI-STARS surveys from Providence and Central Falls. These two cities actively enforced their ban on the sale of flavored tobacco products after each round of RI-STARS was completed. In Providence, for example, only one store was observed to have Game Blue cigarillos (a not clearly labeled product) in over 100 store checks in round three. No stores were observed to have this product in round four (data not shown).

The availability of tobacco discounts fluctuated over four rounds of data collection (**Table 2**). In total, 84 stores were found to have a coupon or discount in fall 2017, compared to 106 stores in early 2018, 60 stores in late 2018, and 91 stores during the final round of RI-STARS. The number of stores observed to offer tobacco product discounts in Providence fell by 93%, from 40 stores in round one to three stores in round four. Increases in tobacco price discounting were observed in Johnston, West Warwick, and Woonsocket but not in Barrington or Central Falls.

Table 2. RI-STARS Observed Availability

Town	RI-STARS Flavors Observed				RI-STARS Discounts Observed			
	Round 1	Round 2	Round 3	Round 4	Round 1	Round 2	Round 3	Round 4
	Fall 2017	Winter 2018	Fall 2018	Winter 2019	Fall 2017	Winter 2018	Fall 2018	Winter 2019
Barrington	2	4	4	4	0	0	0	0
Central Falls	17	12	12	10	1	0	1	0
Johnston	26	24	20	28	11	25	1	22
Middletown	9	10	9	8	7	7	9	8
Providence	73	60	56	7	40	40	8	3
West Warwick	20	21	21	20	10	8	18	23
Woonsocket	34	36	36	24	15	26	23	35
Total	181	167	158	101	84	106	60	91

DISCUSSION

This study offers insight into the tobacco product landscape, including the availability and accessibility of flavored tobacco, discounts, and placement of products in seven municipalities across RI. Observational store survey data showed that conventional cigarettes, e-cigarettes, cigars, cigarillos, and other tobacco products were available to underage buyers in every city and town included in this study.⁹ Retailers offered a range of flavored products, which can increase the likelihood of youth tobacco initiation.¹⁰ While the availability of not-clearly labeled flavored products fell during this study, clearly labeled flavored products were still widely available.

During the two-year study period, it was an ongoing challenge to adapt to the ever-changing modifications and pending legal challenges surrounding the implementation and enforcement of each city's POS tobacco policy. Court cases brought by local tobacco retailers challenged the policy in three municipalities. The towns of Barrington and Johnston are not able to enforce flavor or discount restrictions due to ongoing litigation. This meant that any ban on the sale of flavored tobacco products and price discounting could not be enforced until the cases are resolved in court. The town of Middletown's point of sale tobacco policy was struck down in Newport Superior Court in October 2018. There are currently no plans to appeal this decision.

The cities of West Warwick and Woonsocket do not include a ban on the discounting of tobacco products in their local POS policy. In both cities, the observed availability of tobacco price discounting increased over three rounds of store observations. Central Falls and Providence were the only cities able to enforce their local ban prohibiting the sale of flavored tobacco products, excluding menthol products, and tobacco price discounting. As a result, there were notable decreases in the availability of flavored tobacco products and price discounts for tobacco products in their local stores over two years. Thus, study findings must be understood in the context of differences in POS ordinances passed in each of the grant-funded municipalities and litigation.

A second challenge was in the measurement of flavored tobacco products. Community partners could not reasonably assess each store for the presence of flavored tobacco products as new flavored little-cigars and e-cigarettes continue to be marketed and promoted to youth.^{2,3} Instead, Game Blue cigarillos were the only not-clearly labeled product on the RI-STARS survey.

Despite these challenges, this study provides insight into the tobacco environment in RI and the potential for using observational store surveys to assess the effectiveness of retail POS tobacco policies. Health equity is a key issue when implementing POS strategies, and RI is no exception. Evidence supports that low-income and predominately minority communities are more heavily exposed to tobacco advertising and have a higher density of tobacco retailers when

compared to other communities.¹¹ Over two years, seven municipalities established the community infrastructure for passing and implementing POS tobacco policies, providing retailer education, and fining tobacco retailers that did not comply with the policy if enforcement was not subject to litigation. Three of the municipalities – Providence, Central Falls and Woonsocket – are high poverty cities. In these three cities more than one in four children live below poverty (36%) and an estimated 17% live in extreme poverty,¹² reinforcing the justification for their inclusion in the initiative.

Eliminating cancer and other diseases caused by tobacco use is one of the highest public health priorities of our nation. E-cigarettes, which do not burn tobacco, still deliver nicotine, flavor additives, and other chemicals, including flavor chemicals that are potentially harmful to users.⁴ This is of concern since many flavored tobacco products are marketed with flavors that appeal to youth but without naming the flavor used.⁴ In this rapidly changing tobacco landscape, it is critical that physicians and other health care providers are well informed about different tobacco products and their patients' use of these products, particularly by youth.

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