

New Jersey Tobacco Point-of-Sale Review

January 2024

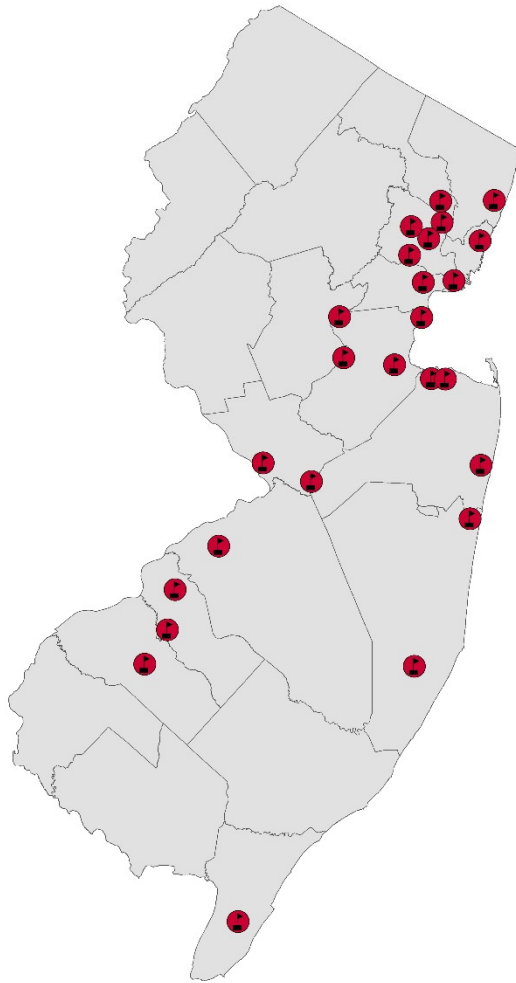


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BACKGROUND

The tobacco industry invests billions of dollars marketing its products at the point-of-sale. For example, in 2022, cigarette and smokeless tobacco companies spent more than 8.6 billion dollars on product marketing, most of which occurred in the retail setting through price discounting, promotional allowances, and point of sale advertising.^{1,2} E-cigarette manufacturers spent 719.9 million dollars on product marketing in 2020 although point of sale advertising was less than one tenth (61.8 million) of total advertising costs due to the product pre-dating the MSA.³ The tobacco industry provides incentives to retailers to post signage inside and outside of their stores to promote their products. Among the most popular is a “power wall,” an interior large shelving display that showcases numerous tobacco products and features company logos and other advertisements (see Figure 1).

Figure 1. A tobacco "power wall" in a New Jersey convenience store












Tobacco advertisements in retail settings have the potential to encourage current users to keep buying tobacco products, entice non-users to start, and perpetuate the idea that smoking is

socially acceptable. Exposure to tobacco promotions in stores is also known to influence product use among youth. The tobacco retail environment in areas where youth spend time (e.g., near parks, schools) seems particularly influential. Several studies have documented a consistent relationship between tobacco advertising near schools and cigarette smoking among students.^{4,5} Tobacco companies have initiated and increased expenditures in marketing efforts of alternative tobacco products including cigarillos and e-cigarettes at the point-of-sale.⁶ Furthermore, exposure to point-of-sale cigarillo advertising was associated with higher odds of current use.⁷

Although rates of cigarette smoking among youth have declined in recent years, use of non-cigarette tobacco products, such as cigars/cigarillos, smokeless tobacco, tobacco-free nicotine pouches, electronic cigarettes (e-cigarettes) and hookah, should continue to be monitored. (Figure 2, below, describes these non-cigarette tobacco products).

Figure 2. Description of non-cigarette tobacco products

Product	Description	Examples
Cigars or cigarillos	Roll of tobacco wrapped in a tobacco leaf or another substance containing tobacco. Products come in many different sizes and some include wooden or plastic tips. Among young people, cigarillos are sometimes used to roll blunts with marijuana. Popular brands include Black & Mild, Swisher Sweets, and Dutch Masters.	
Smokeless tobacco	Typically refers to moist snuff (sometimes called “dip”) and snus (a Swedish type of moist snuff). The user places the shredded or ground tobacco between their lip and their gum. Popular brands include Grizzly, Copenhagen, Skoal and Camel Snus.	

Nicotine pouches	Oral nicotine products are used similarly to snus. Unlike snus, they do not contain leaf tobacco. The products are still derived from tobacco and contain nicotine. Popular brands include Zyn, Velo, and On!.	 
Electronic cigarettes (“e-cigarettes”)	A battery-powered device that produces a vapor that the user inhales. The vapor often contains nicotine, flavorings, and other chemicals. E-cigarettes are sold in pods and disposable varieties. Popular brands include JUUL, Vuse, Hypee and Puff Bar.	  
Hookah Tobacco	A mix of tobacco and molasses, with additive flavors, smoked through a single- or multi-stemmed charcoal-heated apparatus. Popular brands include Al Fakher and Starbuzz.	 

Data from the 2022 New Jersey Youth Tobacco Survey (NJYTS) showed that while 1.2% of high school students were current cigarette smokers, 9.6% were current users of e-cigarettes, 2.1% were current nicotine pouch users, 2.1% were current cigar/cigarillo smokers and 1.9% were current hookah tobacco users.⁸ The promotion of non-cigarette tobacco products such as e-cigarettes, cigars/cigarillos and nicotine pouches in retail settings is understudied, but evidence suggests that these products are advertised in much the same way as cigarettes.⁹ Figure 3 highlights the visibility of non-cigarette tobacco product advertising in a New Jersey convenience store.

Figure 3. Non-cigarette tobacco product advertising in a New Jersey convenience store



Recent federal and state actions have attempted to decrease the availability of flavored e-cigarettes. In an effort to curb the use of e-cigarettes among youth and young adults, the U.S. Food and Drug Administration (FDA) issued a prioritized enforcement policy for flavored cartridge-based e-cigarette products, excluding menthol, that did not have premarket authorization, effective February 2020. New Jersey (NJ) also became the first state to ban the sales of all types of flavored e-cigarette products, including menthol and mint, effective April 2020. This report provides data on flavored e-cigarettes, including flavored disposables, availability in New Jersey licensed tobacco retail stores following the implementation of the state's ban on such products.

AIMS

This project collected repeated point-of-sale data (interior and exterior of stores) drawn from stores surrounding a representative sample of New Jersey high schools (n=41) between 2015 and 2023. We present the prevalence of tobacco product availability and advertising in

stores, as well as differences by store type and locality (urban vs. non-urban school districts) for 2023 as well as over the last three years.

METHODS

In 2015, we mapped the locations of the 41 high schools participating in the 2014 NJYTS and drew a half-mile buffer around each school. The half-mile radius (2,640 ft.) was chosen as the cutoff based on the premise that this was the most convenient distance that students would travel before, during, and after school. Of the 41 schools participating in the 2014 NJYTS, 15 (36.6%) had no tobacco retailers within a half-mile radius and these were excluded from data collection. The remaining 26 schools had a total of 211 licensed tobacco retailers within a half-mile radius. In 2017, one high school changed location, but we repeated audits in the two licensed tobacco retailers located nearby. In 2019 and 2023, schools with one tobacco retailer within a half-mile radius were omitted from the sample due to permanent closure of existing stores, bringing the total number of schools with at least one tobacco retailer within a half-mile radius to 24.

We attempted audits at all 211 licensed tobacco retailers identified in the original sample from 2015. Since 2015, a number of stores either closed permanently or no longer sold tobacco products. In 2018, to examine trends in point-of-sale tobacco product availability and advertising, we limited audits to stores where data was collected in the three previous years. In 2022, we added 12 stores to the sample that had a New Jersey tobacco license and fell within the half-mile buffer of high schools already in the sample. Table 1 details the number of completed store audits by year. In 2020, we only collected data on tobacco product availability to minimize time in the store during a pandemic.

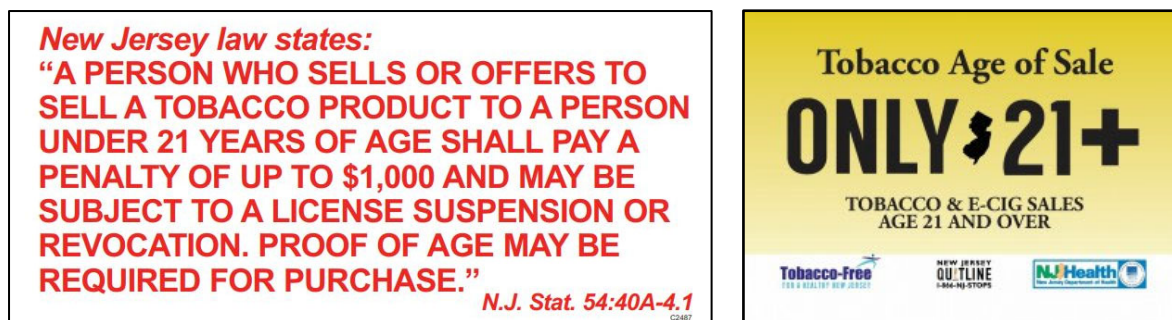
Table 1. Completed New Jersey point-of-sale audits by year

POS Data Collection Year	Completed Audits
2015	191
2016	191
2017	191
2018	174
2019	156
2020	143
2021	145
2022	156
2023	156

Using a Qualtrics survey on a smartphone device, trained auditors collected detailed information each year on interior and exterior advertisements of tobacco products, tobacco product availability, and presence of tobacco age of sale signage. Each store audit took approximately 20 minutes.

Given the shifts in the tobacco marketplace, the survey underwent modifications over the years to include availability of emerging tobacco products and retail policy changes. For example, in 2018, we added questions pertaining to the availability of tobacco age of sale signs in stores. Figure 4 shows the two age of sale signs recorded by auditors that were mandatory and non-mandatory; the yellow “Only 21+” sign was distributed by the New Jersey Department of Health to licensed tobacco retailers just prior to NJ’s Tobacco 21 law becoming effective in November 2017. Also, in 2018 we added items that measured the availability of JUUL products. In 2019, we added items to assess advertising and availability of tobacco-free nicotine pouches. In 2020, we added items to assess availability of flavored and non-flavored disposable e-cigarettes. In 2022, we added items to assess the availability of nicotine replacement therapy (NRT) products and state-mandated signage of NRT and NJ Quitline. In 2023, we added items to assess the advertising and availability of premium cigars.

Figure 4. Required New Jersey licensed tobacco retailer age of sale (left) and non-mandatory New Jersey Department of Health tobacco age of sale signage (right)



For this project, an “advertisement” was defined as an industry-made sign featuring a company’s logo and/or an image of the product. Signs that said, “Cigarettes sold here,” for example, were not included. Only advertisements that were clearly visible and larger than the size of an index card (3” x 5”) were counted. Smaller ads are burdensome for data collectors to locate and count, but more importantly, they may be less noticeable to youth visiting the stores. Figure 5 highlights (in red) examples of tobacco advertisements that would be counted for this project.

Figure 5. Examples of advertisements that would qualify for inclusion



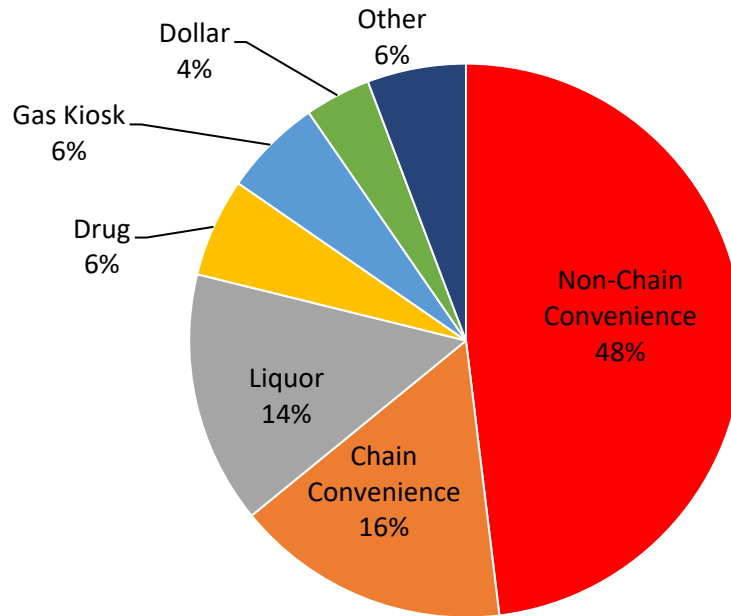
For each of the tobacco products studied in this project (e.g., cigarettes, cigars/cigarillos, premium cigars, smokeless tobacco, e-cigarettes, nicotine pouches, and hookah tobacco), we present data on the prevalence of exterior and interior advertisements and product availability across all stores in the sample. Additionally, we describe differences by store type (i.e., convenience stores, liquor stores, drug stores, gas station kiosks, dollar stores, “other” types of stores) and locality (urban vs. non-urban school districts). Urban districts were defined as municipalities with more than 10,000 residents per square mile (US Census, 2010)¹⁰ and where schools had greater than 50% non-white enrollment.¹¹

RESULTS

In 2023, we successfully audited 156 of the 174 stores in the sample (89.6%). The 18 stores that we were unable to audit permanently closed. This completion rate is in line with our previous data collection efforts (range: 89.6%-93.7%). The number of stores audited for each school ranged from one to 36, with an average of 6.5 tobacco retailers within a half-mile radius per high school.

Figure 6 presents the distribution of store types in the sample. The most common store type was non-chain convenience store (48%), followed by chain convenience store (16%; e.g., Wawa, QuickChek, 7-Eleven, with or without gas station attached), liquor store (14%), drug store (6%), gas station kiosk (6%), dollar stores (4%), and other (6%).

Figure 6. Store type %, 2023 (n=156)



The sample contained a total of 24 schools. Six of these schools were located in urban districts and the remaining 18 were located in non-urban districts. Two-thirds of the 94 stores located in urban districts were non-chain convenience stores. Liquor stores (11.7%) were the second most common store type in urban districts. In non-urban districts, chain convenience (29%), non-chain convenience (21%), and liquor stores (19.4%) were the most common store types (Table 2).

Table 2. Store type by district type, 2023

Store type	Urban district N=94 (%)	Non-urban district N=62 (%)
Non-Chain Convenience	62 (66%)	13 (21%)
Convenience, chain	7 (7.4%)	18 (29%)
Liquor store	11 (11.7%)	12 (19.4%)
Drug store	3 (3.2%)	6 (9.7%)
Gas station, kiosk only	0 (0%)	9 (14.5%)
Dollar store	5 (5.3%)	1 (1.6%)
Other	6 (6.4%)	3 (4.8%)
Total	94 (100%)	62 (100%)

Cigarettes

Table 3 presents the availability of cigarettes and the prevalence of cigarette ads by store type. Cigarettes were commonly available across all store types, and only 2 stores that sold cigarettes did not sell menthol cigarettes. In our sample, 13 stores (8.3%) did not sell cigarettes, and 9 of those stores had no tobacco products available for sale at all. Exterior cigarette advertisements were present in 26.3% of all stores, and these ads were most prevalent in chain convenience stores (40%), non-chain convenience stores (33.3%), and gas station kiosks (33.3%). Exterior cigarette ads were not present in drug stores and “other” stores. Interior cigarette ads were more common than exterior ads, as they were found in almost half (48.7%) of stores in the sample. These ads were most common in chain convenience (84.0%) and dollar stores (66.7%). Exterior menthol cigarette ads were seen in just over a fifth (21.2%) of all stores in the sample, most common in chain (36%) and non-chain (28%) convenience stores and absent in drug, dollar, and “other” stores. Interior menthol cigarette advertisements were found in 35.9% of the stores in the sample. These ads were most prevalent in chain (72%) and non-chain (36%) convenience stores, and were absent from “other” stores.

Table 3. Cigarette availability and presence of cigarette ads in stores by store type, 2023

	Availability	Exterior ads	Exterior menthol ads	Interior ads	Interior menthol ads
Store type	%	%	%	%	%
Non-Chain Convenience (n=75)	94.7	33.3	28.0	48.0	36.0
Chain Convenience (n=25)	100.0	40.0	36.0	84.0	72.0
Liquor (n=23)	95.7	8.7	8.7	39.1	26.1
Drug (n=9)	77.8	0.0	0.0	44.4	33.3
Gas Kiosk (n=9)	77.8	33.3	11.1	0.0	0.0
Dollar (n=6)	83.3	16.7	0.0	66.7	33.3
Other (n=9)	66.7	0.0	0.0	22.2	0.0
Overall (n=156)	91.7	26.3	21.2	48.7	35.9

The volume of exterior and interior cigarette ads by store type are shown in Tables 4 and 5. Overall, 4.5% of stores had five or more exterior ads. Overall, if stores had any cigarette ads, they mostly had 1 to 4 ads; 21.8% of stores had exterior ads, 30.1% of stores had interior ads).

Five or more interior ads were observed most often in chain convenience (72%) and drug (33.3%) stores.

Table 4. Number of exterior cigarette ads in stores by store type, 2023

Store type	0 ads %	1 to 4 ads %	5 or more ads %
Non-Chain Convenience (n=75)	66.7	26.7	6.7
Chain Convenience (n=25)	60.0	32.0	8.0
Liquor (n=23)	91.3	8.7	0.0
Drug (n=9)	100.0	0.0	0.0
Gas Kiosk (n=9)	66.7	33.3	0.0
Dollar (n=6)	83.3	16.7	0.0
Other (n=9)	89.2	20.2	9.3
Overall (n=156)	73.7	21.8	4.5

Table 5. Number of interior cigarette ads in stores by store type, 2023

Store type	0 ads %	1 to 4 ads %	5 or more ads %
Non-Chain Convenience (n=75)	52.0	42.7	5.3
Chain Convenience (n=25)	16.0	12.0	72.0
Liquor (n=23)	60.9	26.1	13.0
Drug (n=9)	55.6	11.1	33.3
Gas Kiosk (n=9)	100.0	0.0	0.0
Dollar (n=6)	33.3	50.0	16.7
Other (n=9)	77.8	22.2	0.0
Overall (n=156)	51.3	30.1	18.6

Figures 7 and 8 present the differences in the prevalence and volume of cigarette advertising in stores in urban and non-urban districts. Compared to stores in urban districts, non-urban stores had a higher prevalence of interior cigarette advertisements (59.7% vs 41.5%) and a slightly higher prevalence for exterior, exterior menthol, and interior menthol advertisements. For exterior cigarette ads, non-urban stores more often had a volume of five or more ads than urban stores (9.7% vs 1.1%). Similarly, a volume of five or more interior cigarette ads was much more prevalent in non-urban stores than urban stores (29% vs 11.7%).

Figure 7. Presence of cigarette ads in stores, by district type (%), 2023

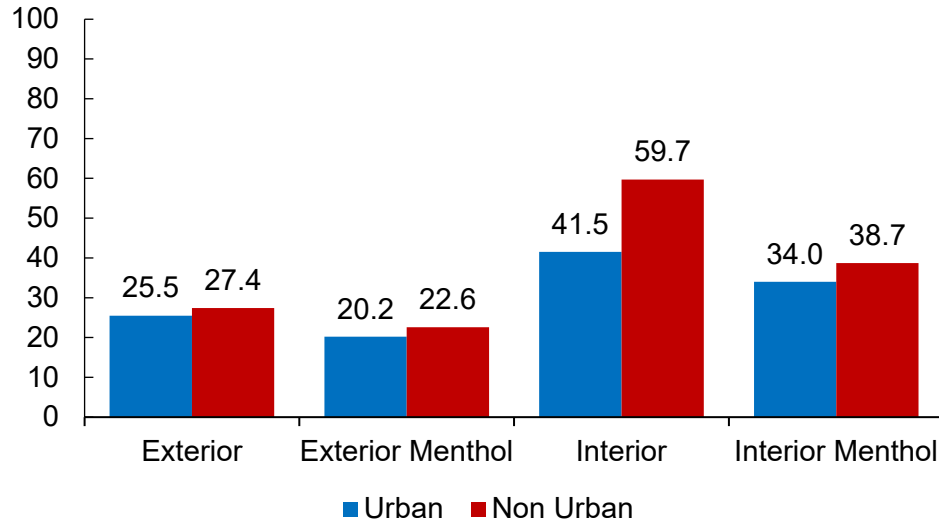
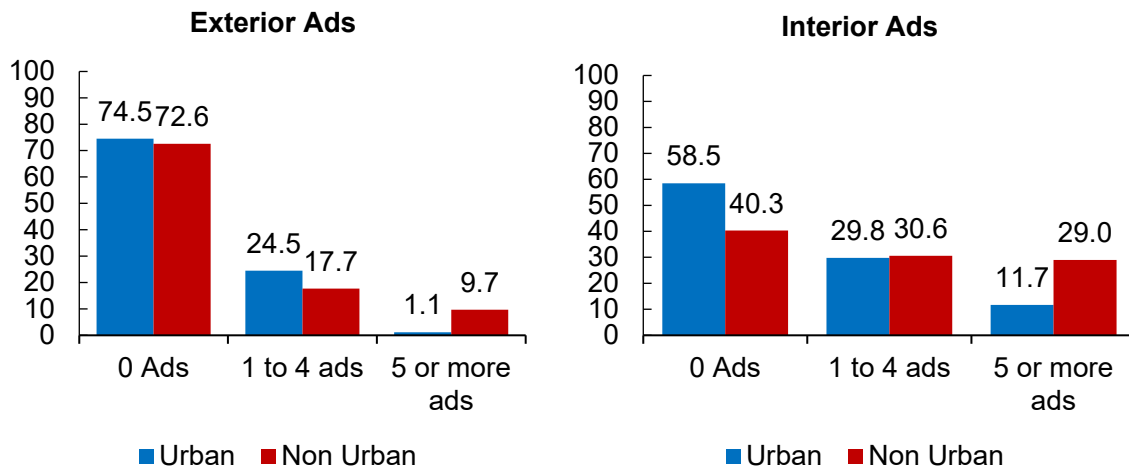


Figure 8. Number of exterior and interior cigarette ads in stores, by district type (%), 2023



Cigars/cigarillos

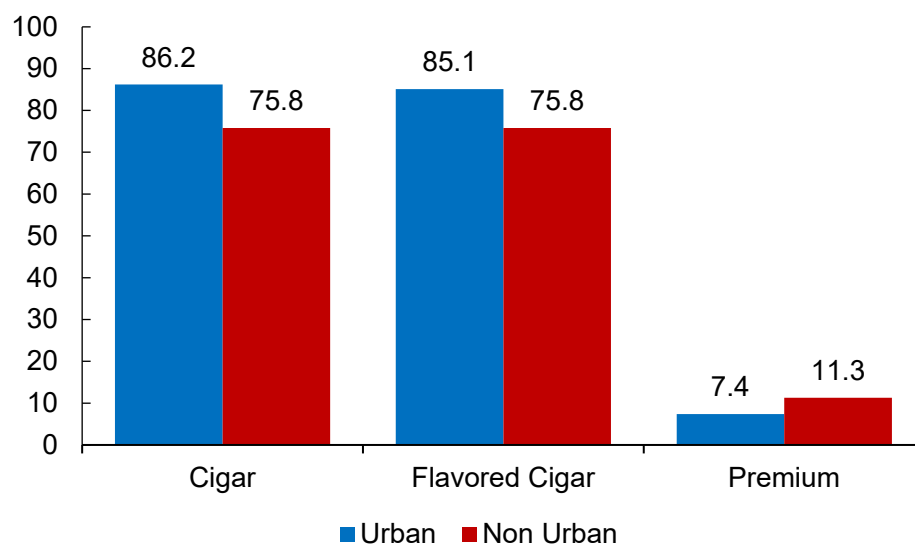
Cigars/cigarillos were the second most commonly available tobacco products in sampled stores. Table 6 shows that 82.1% of stores sold cigars, and all but one of those stores also sold flavored cigars (81.4%). Cigars were found in every store type, but most often available in chain (96%) and non-chain convenience stores (93.3%). Drug and “other” stores were the only store types to sell cigars in less than two thirds of its stores (33.3%). Premium cigars were only available in 9% of the sample, most available in liquor (39.1%) and “other” stores (22.2%), and absent from

non-chain convenience stores, gas station kiosks, and dollar stores. Flavored cigars were more common in urban stores than non-urban stores, but premium cigars were more common in non-urban stores than urban stores (Figure 9).

Table 6. Cigar/cigarillo availability by store type, 2023

Store type	Cigar availability %	Flavored cigar availability %	Premium cigar availability %
Non-Chain Convenience (n=75)	93.3	93.3	0.0
Chain Convenience (n=25)	96.0	92.0	8.0
Liquor (n=23)	78.3	78.3	39.1
Drug (n=9)	33.3	33.3	11.1
Gas Kiosk (n=9)	66.7	66.7	0.0
Dollar (n=6)	66.7	66.7	0.0
Other (n=9)	33.3	33.3	22.2
Overall (n=156)	82.1	81.4	9.0

Figure 9. Cigar, flavored cigar, and premium cigar availability by district type %, 2023



Cigars were also the second most advertised tobacco product among stores in the sample. Table 7 shows that exterior cigar ads were present in 18.6% of stores, and the stores that most often had these ads were chain (32%) and non-chain convenience stores (24%). Exterior cigar ads were absent from drug and dollar stores. Exterior flavored cigar ads were seen in 14.7% of stores, and the only store types that had these ads were chain convenience (32%),

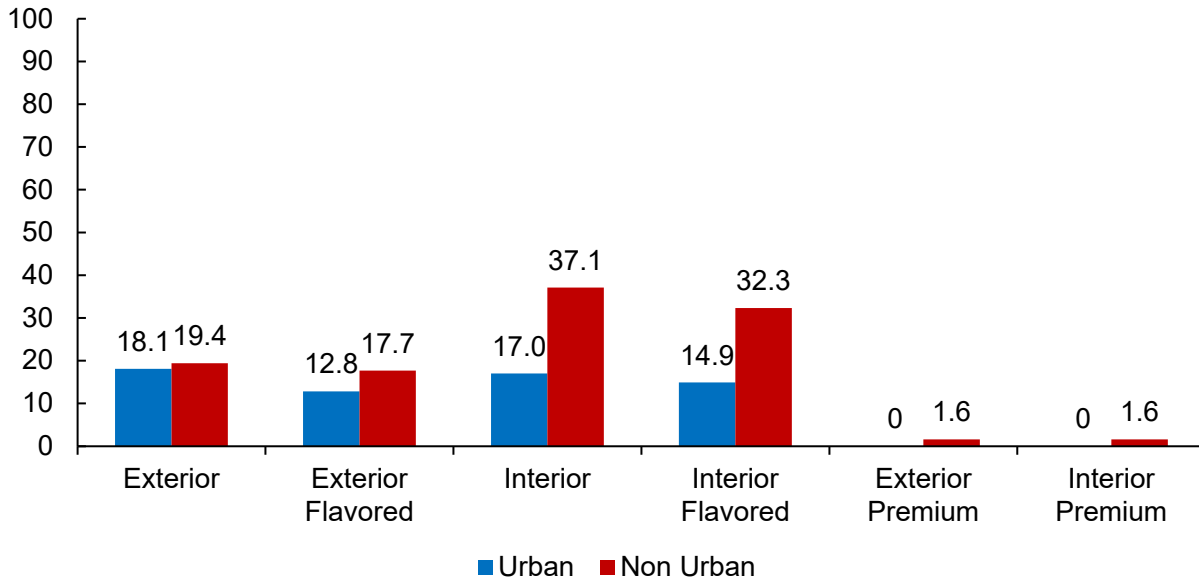
non-chain convenience (18.7%), and gas station kiosks (11.1%). Interior cigar ads were more prevalent than exterior cigar ads, as they were seen in a quarter of stores in the sample. Interior cigar ads were most prevalent in dollar (66.7%), chain convenience (44%), and liquor stores (26.1%), and they were absent from drug stores. Interior flavored ads were only present in dollar (66.7%), chain convenience (36%), liquor (21.7%), and non-chain convenience stores (21.3%). Premium cigar ads were rare in the sample (0.6%) and were only present in one “other” store.

Table 7. Presence of cigar/cigarillo ads in stores by store type, 2023

	Exterior ads	Exterior flavored ads	Interior ads	Interior flavored ads	Premium ads
Store type	%	%	%	%	%
Non-Chain Convenience (n=75)	24.0	18.7	22.7	21.3	0.0
Chain Convenience (n=25)	32.0	32.0	44.0	36.0	0.0
Liquor (n=23)	4.3	0.0	26.1	21.7	0.0
Drug (n=9)	0.0	0.0	0.0	0.0	0.0
Gas Kiosk (n=9)	11.1	11.1	0.0	0.0	0.0
Dollar (n=6)	0.0	0.0	66.7	66.7	0.0
Other (n=9)	11.1	0.0	11.1	0.0	11.1
Overall (n=156)	18.6	14.7	25.0	21.8	0.6

As presented in Figure 10, exterior and interior ads were both more prevalent in stores located in non-urban districts (19.7%, 37.1% vs 18.1%, 17%, respectively). Flavored exterior and interior ads were also more prevalent in non-urban stores (17.1%, 32.3% vs 12.8%, 14.9%, respectively). Premium cigar ads were only found in a non-urban store.

Figure 10. Presence of cigar ads in stores by district type %, 2023



Smokeless Tobacco

Smokeless tobacco products were sold in a quarter of stores in the sample. There were most available in chain convenience stores (80%), but also sold in drug stores (22.2%), non-chain convenience stores (18.7%), dollar stores (16.7%), and liquor stores (8.7%). Smokeless tobacco was not sold at gas kiosks and other stores.

Table 8. Smokeless tobacco availability in stores by store type, 2023

Store type	Smokeless tobacco availability %
Non-Chain Convenience (n=75)	18.7
Chain Convenience (n=25)	80.0
Liquor (n=23)	8.7
Drug (n=9)	22.2
Gas Kiosk (n=9)	0.0
Dollar (n=6)	16.7
Other (n=9)	0.0
Overall (n=156)	25.0

The prevalence of smokeless tobacco advertisements across different store types is presented in Table 9. Exterior smokeless tobacco ads were very rare (0.6%), and only present in

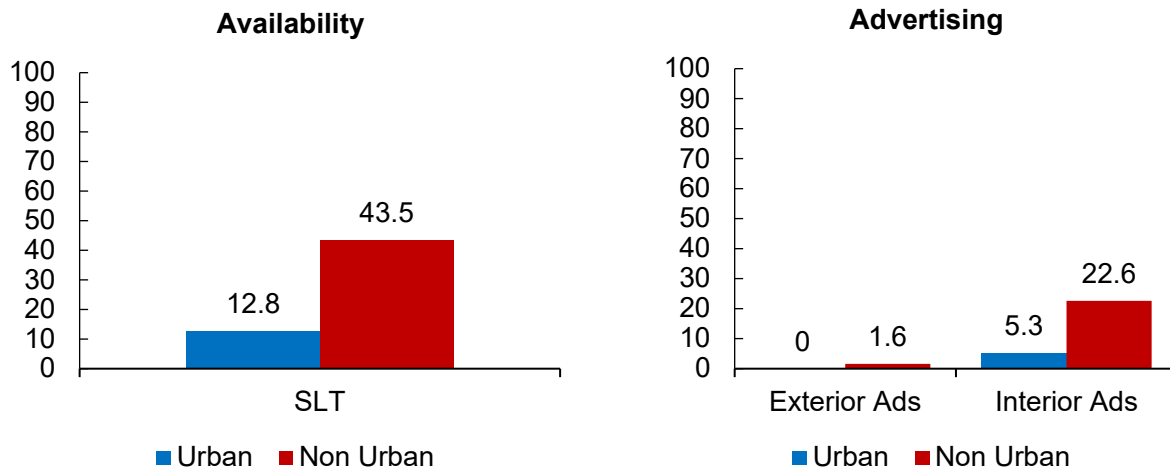
chain convenience stores (4%). Interior smokeless tobacco ads were much more common, but only found in 12.2% of stores in the sample. These ads were only present in chain convenience (64%), dollar (16.7%), and non-chain convenience stores (2.7%).

Table 9. Smokeless tobacco ads in stores by store type, 2023

Store type	Exterior ads %	Interior ads %
Non-Chain Convenience (n=75)	0.0	2.7
Chain Convenience (n=25)	4.0	64.0
Liquor (n=23)	0.0	0.0
Drug (n=9)	0.0	0.0
Gas Kiosk (n=9)	0.0	0.0
Dollar (n=6)	0.0	16.7
Other (n=9)	0.0	0.0
Overall (n=156)	0.6	12.2

Figure 11 shows the advertising prevalence and availability of smokeless tobacco by district type. Exterior smokeless ads were not present in urban stores, and only present in 1.6% of non-urban stores. Interior ads were more prevalent in both district types, as 5.3% of stores in urban areas and 22.6% of stores in non-urban areas displayed interior smokeless tobacco ads. Differences in smokeless tobacco availability by district type followed a similar trend to the advertising differences. Smokeless tobacco was available in 22.6% of non-urban stores and only 5.3% of urban stores.

Figure 11. Advertising and availability of smokeless tobacco in stores by district type %, 2023



Nicotine Pouches

Nearly a fifth of all stores in the sample sold nicotine pouches (19.9%). These products were most commonly available in chain convenience stores (72%), drug stores (33.3%), and dollar stores (33.3%). Nicotine pouches were not available in any of the sample's gas station kiosks or stores labeled as "other."

Table 10. Nicotine pouch availability in stores by store type, 2023

Store type	Nicotine pouch availability
	%
Non-Chain Convenience (n=75)	8.0
Chain Convenience (n=25)	72.0
Liquor (n=23)	8.7
Drug (n=9)	33.3
Gas Kiosk (n=9)	0.0
Dollar (n=6)	33.3
Other (n=9)	0.0
Overall (n=156)	19.9

Table 11 shows the prevalence of nicotine pouch advertising. Exterior nicotine pouch ads were only found in 7.1% of stores overall and only in chain convenience (36%) and non-chain convenience stores (2.7%). Interior nicotine pouch ads were found in 12.2% of stores in

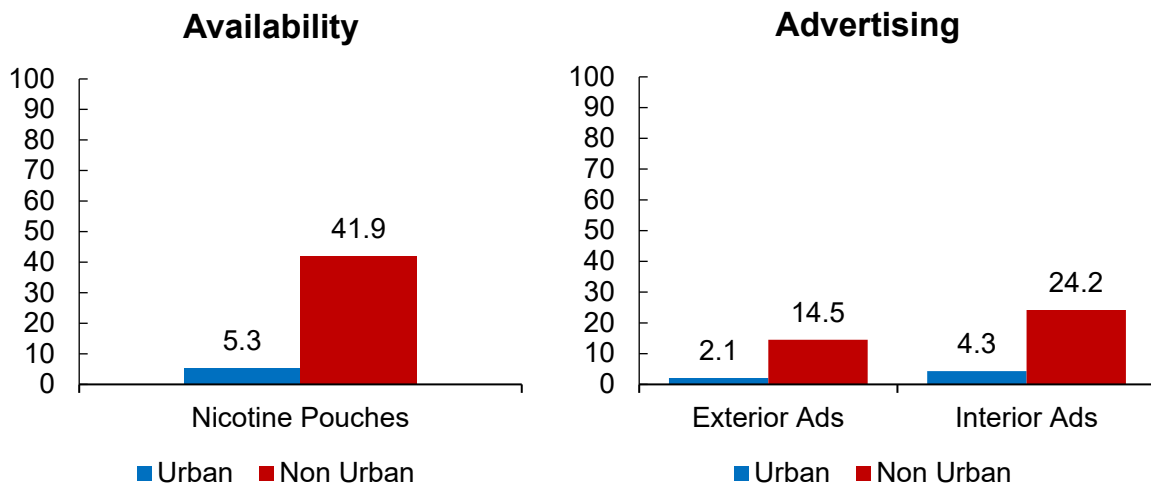
the sample. These ads were found in chain convenience (60%), drug (22.2%), dollar (16.7%), and non-chain convenience stores (1.3%).

Table 11. Nicotine pouch advertising by store type, 2023

Store type	Exterior ads	Interior ads
	%	%
Non-Chain Convenience (n=75)	2.7	1.3
Chain Convenience (n=25)	36.0	60.0
Liquor (n=23)	0.0	0.0
Drug (n=9)	0.0	22.2
Gas Kiosk (n=9)	0.0	0.0
Dollar (n=6)	0.0	16.7
Other (n=9)	0.0	0.0
Overall (n=156)	7.1	12.2

As shown in Figure 12, the prevalence of stores that sold nicotine pouches was almost eight times higher in non-urban areas compared to urban areas (41.9% vs 5.3%). A similar disparity between district types is also present for nicotine pouch advertising prevalence. Non-urban stores were much more likely than urban stores to have exterior (14.5% vs 2.1%) or interior (24.2% vs 4.3%) nicotine pouch advertisements.

Figure 12. Availability and advertising of nicotine pouches in stores by district type %, 2023



E-cigarettes

E-cigarettes were the third most commonly available tobacco product at stores in the sample, as they were sold in just under half of the stores in the sample (49.4%). Table 12 shows that e-cigarettes were sold in all store types, and most commonly available in chain convenience (84%), non-chain convenience (56%), and liquor stores (43.5%). Flavored e-cigarettes were sold in 39.7% of the sample and also most available in non-chain convenience (50.7%), chain convenience (48%), and liquor stores (43.5%). Flavored e-cigarettes were not available in any drug stores or dollar stores.

Table 12. Availability of e-cigarettes and flavored e-cigarettes by store type, 2023

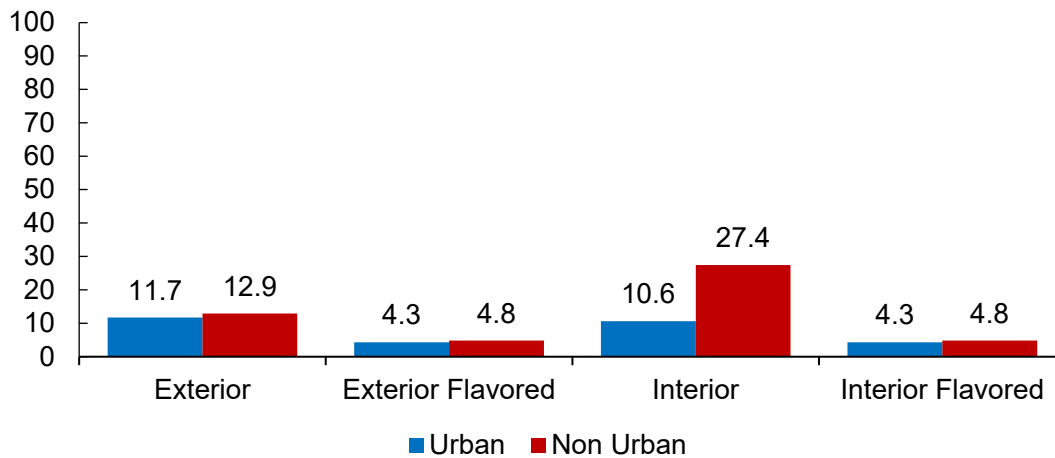
Store type	E-cig availability	Flavored e-cig availability
	%	%
Non-Chain Convenience (n=75)	56.0	50.7
Chain Convenience (n=25)	84.0	48.0
Liquor (n=23)	43.5	43.5
Drug (n=9)	11.1	0.0
Gas Kiosk (n=9)	11.1	11.1
Dollar (n=6)	16.7	0.0
Other (n=9)	11.1	11.1
Overall (n=156)	49.4	39.7

As shown in Table 12, exterior e-cigarette advertisements were seen in 12.2% of all stores and, most prevalent in chain convenience stores (28%). Exterior ads for e-cigarettes were absent from drug stores, gas station kiosks, and dollar stores. Exterior flavored e-cigarette ads were seen in 4.5% of stores, and only seen in “other” (11.1%), chain convenience (8%), liquor (4.3%), and non-chain convenience stores (4%). Interior e-cigarette advertisements were seen in 17.3% of the sample’s stores, and only found in chain convenience (60%), non-chain convenience (14.7%), and liquor stores (4.3%). Only 4.5% of stores had interior flavored e-cigarette ads, and the only store types with these ads were chain convenience (12%) and non-chain convenience (5.3%) stores.

Table 13. Presence of e-cigarette advertising by store type, 2023

Store type	Exterior ads	Exterior flavored ads	Interior ads	Interior flavored ads
	%	%	%	%
Non-Chain Convenience (n=75)	13.3	4.0	14.7	5.3
Chain Convenience (n=25)	28.0	8.0	60.0	12.0
Liquor (n=23)	4.3	4.3	4.3	0.0
Drug (n=9)	0.0	0.0	0.0	0.0
Gas Kiosk (n=9)	0.0	0.0	0.0	0.0
Dollar (n=6)	0.0	0.0	0.0	0.0
Other (n=9)	11.1	11.1	0.0	0.0
Overall (n=156)	12.2	4.5	17.3	4.5

Figure 13 shows that e-cigarette ads were more prevalent in non-urban stores than urban stores. Exterior ads were slightly more prevalent in non-urban stores (12.9%) than in urban stores (11.7%), and the slight difference was also present for flavored exterior ads (4.8% vs 4.3%). While non-urban stores had a much higher interior e-cigarette advertising prevalence than urban stores (27.4% vs 10.6%), the difference in interior flavored advertising prevalence was small (4.8% vs 4.3%)

Figure 13. Presence of e-cigarette ads in stores by district type %, 2023

Disposable e-cigarettes were sold in nearly half of all stores in the sample (46.8%), and all store types sold these products. The store types that most often sold disposables were chain convenience (72%), non-chain convenience (54.7%), and liquor stores (43.5%). Flavored disposable e-cigarettes were sold in 39.7% of the sample's stores, and these products were found

in non-chain convenience (50.7%), chain convenience (48%), liquor (43.5%), gas kiosks (11.1%), and “other” stores (11.1%). Flavored disposables were more available overall in urban stores than in non-urban stores (44.7% vs 32.3%), but the differences between districts varied by store type. Flavored disposables were more available in urban areas than non-urban areas for chain convenience stores (57.1% vs 44.4%), liquor stores (54.5% vs 33.3%), and “other” stores (16.7% vs 0%). These products were more available in non-urban stores than urban stores for non-chain convenience stores (53.8% vs 50.0%), and gas station kiosks (11.1% vs 0%).

Table 14. Availability of disposable e-cigarettes by store type, 2023

Store type	Disposable e-cigarette availability %	Flavored Disposable e-cigarette availability %
Non-Chain Convenience (n=75)	54.7	50.7
Chain Convenience (n=25)	72.0	48.0
Liquor (n=23)	43.5	43.5
Drug (n=9)	11.1	0.0
Gas Kiosk (n=9)	11.1	11.1
Dollar (n=6)	16.7	0.0
Other (n=9)	11.1	11.1
Overall (n=156)	46.8	39.7

Table 15. Availability of flavored disposable e-cigarettes by store and district type, 2023

Store type	Urban districts %	Non-urban districts %
Non-Chain Convenience	50.0	53.8
Convenience, chain	57.1	44.4
Liquor store	54.5	33.3
Drug store	0.0	0.0
Gas station, kiosk only	0.0	11.1
Dollar store	0.0	0.0
Other	16.7	0.0
Overall	44.7	32.3

Hookah

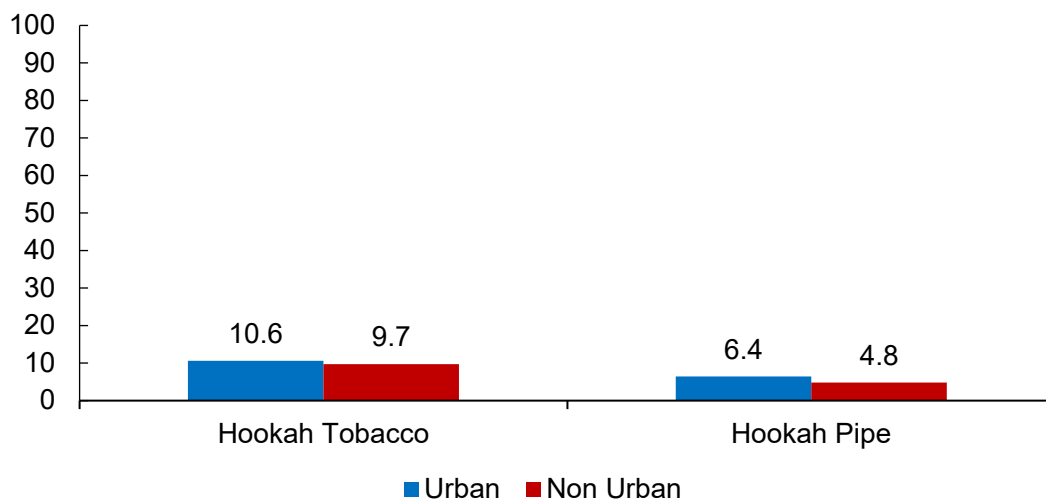
Hookah tobacco was available in 10.3% of all stores in the sample and hookah pipes were available in 5.8% of the stores in the sample. Hookah tobacco was found in “other” stores (22.2%), non-chain convenience stores (13.3%), chain convenience stores (12%), and liquor stores (4.3%).

Hookah pipes were only found in “other” stores (22.2%), chain convenience stores (8%), non-chain convenience stores (6.7%). As shown in Figure 14, both hookah tobacco and hookah pipes were more available in urban areas than non-urban areas (10.6% vs 9.7% and 6.4% vs 4.8%, respectively).

Table 16. Hookah tobacco and hookah pipe availability by store type, 2023

Store type	Hookah tobacco availability %	Hookah pipe availability %
Non-Chain Convenience (n=75)	13.3	6.7
Chain Convenience (n=25)	12.0	8.0
Liquor (n=23)	4.3	0.0
Drug (n=9)	0.0	0.0
Gas Kiosk (n=9)	0.0	0.0
Dollar (n=6)	0.0	0.0
Other (n=9)	22.2	22.2
Overall (n=156)	10.3	5.8

Figure 14. Hookah tobacco and hookah pipe availability in stores by district type %, 2023



Compliance with New Jersey Tobacco Age of Sale Signs

Table 17 shows that 9.6% of stores in the sample displayed the mandatory tobacco age of sale signs. Drug stores (44.4%) and liquor stores (17.4%) were the only store types with compliance rates in the double-digits. Mandatory tobacco age of sale signs were absent in the sample's gas kiosks, dollar stores, and “other” stores. FDA age of sale calculators were observed

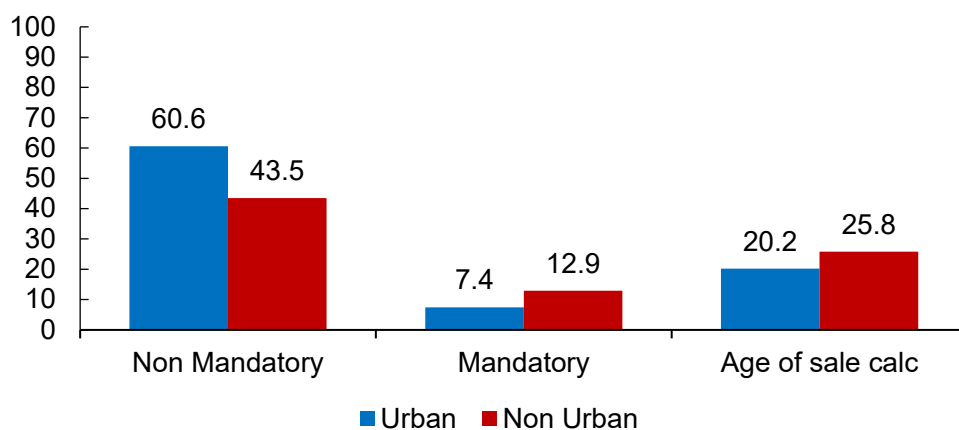
in over a fifth of stores in the sample (22.4%) and present all store types but most common in drug (33.3%) and liquor stores (30.4%). Non-mandatory tobacco age of sale signs were seen in over half of the stores in the sample (53.8%), and these signs were most common in liquor (73.9%), non-chain convenience (61.3%), drug (55.6%), and dollar stores (50.0%).

Table 17. New Jersey tobacco age of sale signage by store type, 2023

Store type	Non-mandatory signage %	Mandatory signage %	FDA Age of sale calculator %
Non-Chain Convenience (n=75)	61.3	6.7	21.3
Chain Convenience (n=25)	24.0	8.0	16.0
Liquor (n=23)	73.9	17.4	30.4
Drug (n=9)	55.6	44.4	33.3
Gas Kiosk (n=9)	44.4	0.0	22.2
Dollar (n=6)	50.0	0.0	16.7
Other (n=9)	33.3	0.0	22.2
Overall (n=156)	53.8	9.6	22.4

Figure 15 presents tobacco age of sale signage by district type. Non-mandatory age of sale signage was much more prevalent in urban areas (60.6%) than in non-urban areas (43.5%). However, non-urban areas (12.9%) had higher prevalence of mandatory age of signs than urban areas (7.4%). Non-urban stores were also more likely to have a have an FDA age of sale calculator than urban stores (25.8% vs 20.2%).

Figure 15. New Jersey tobacco age of sale signage in stores by district type %, 2023



Compliance with NRT Requirements

Starting in March of 2022, New Jersey law required tobacco retailers to stock nicotine replacement therapy products (NRT), display a printed notice stating that those products are available, and display the official logo, phone number, and internet address of the NJ Smoking Quitline. As shown in Table 18, NRT was available in only 12.8% of stores in the sample. NRT was most commonly available in drug stores (100%), dollar stores (33.3%), and chain convenience stores (32%). NRT was not available in liquor, gas kiosks, and “other” stores. Only 3.8% of stores displayed a notice of NRT availability, and only dollar (33.3%) and drug stores (22.2%) had a double-digit prevalence. Notice of NRT availability was absent in non-chain convenience stores, gas kiosks, and “other” stores. Signs displaying the official logo, phone number, and internet address of NJ Quitline were only found in 5.8% of stores in the sample. Dollar stores had the highest prevalence of Quitline signage at 33.3% (33.3%), and there were no Quitline signs observed in drug stores, gas kiosks, or “other” stores. Overall, NRT advertisements were seen in 1.9% but present more often in dollar (16.7%), drug (11.1%), and chain convenience stores (4%).

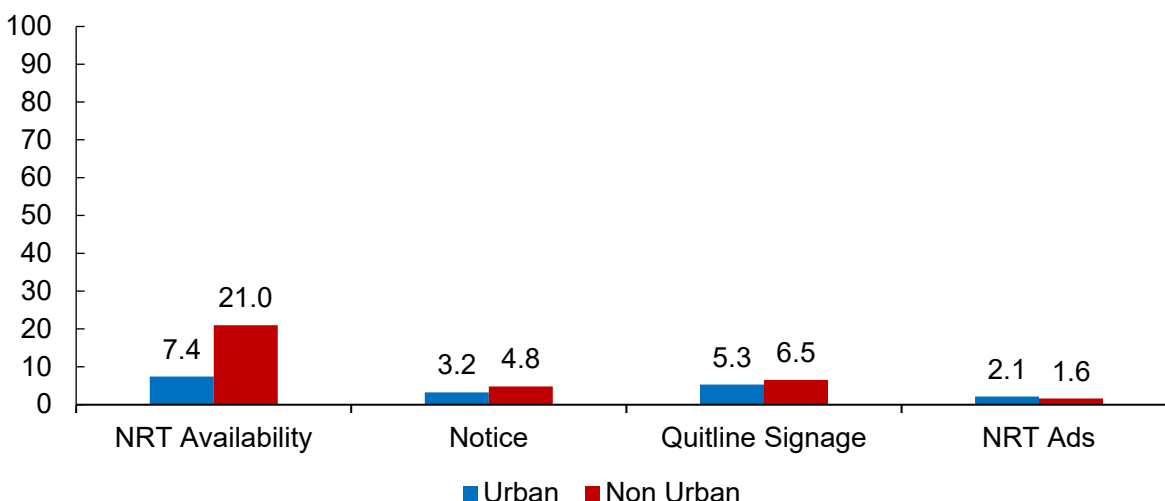
Table 18. NRT law compliance and NRT ads and promotion by store type, 2023

	NRT Availability	NRT Notice	Quitline Sign	NRT ads
Store type	%	%	%	%
Non-Chain Convenience (n=75)	1.3	0.0	4.0	0.0
Chain Convenience (n=25)	32.0	4.0	8.0	4.0
Liquor (n=23)	0.0	4.3	8.7	0.0
Drug (n=9)	100.0	22.2	0.0	11.1
Gas Kiosk (n=9)	0.0	0.0	0.0	0.0
Dollar (n=6)	33.3	33.3	33.3	16.7
Other (n=9)	0.0	0.0	0.0	0.0
Overall (n=156)	12.8	3.8	5.8	1.9

Figure 16 displays the compliance with NRT requirements by district type. Non-urban stores were much more likely to sell NRT products than urban stores (21% vs 7.4%). Non-urban

stores also slightly more often displayed NRT notices and Quitline signs than urban stores (4.8% vs 3.2 and 6.5% vs 5.3%, respectively)

Figure 16. NRT law compliance and NRT ads in stores by district type %, 2023



Changes in tobacco advertisements, 2021-2023

Audits were successfully repeated in 133 stores between 2021 and 2023. Table 19 highlights changes in the prevalence of product advertising over these years. Advertising for cigarettes decreased from 2021 to 2023, with interior ads seeing the largest drop (-12.8 percentage points). Advertising for menthol cigarettes followed the same trend, with the largest decrease in interior advertising (-12.0 percentage points). Overall, cigar advertising remained constant, with the exception of a 6.8 percentage point increase in interior flavored cigar advertisements. The prevalence of smokeless tobacco advertising remained relatively low - although the prevalence of ads increased between 2021 and 2022, ads decreased in 2023 to below 2021 levels. Nicotine pouches saw no notable increases in advertising, as exterior ads decreased by 0.3 percentage points and prevalence of interior ads remained at the same level as 2021. E-cigarette ad prevalence remained constant during this period, with the exception of interior flavored e-cigarette ads which increased by 3.8 percentage points between 2021 and 2023

Table 19. Changes in tobacco product advertising between 2021 and 2023 (n=133)

	2021 %	2022 %	2023 %	Percentage Point Change 2021 vs. 2023
Cigarettes				
Exterior cigarette ads	39.8	33.1	29.3	-10.5
Exterior menthol cigarette ads	34.6	24.8	23.3	-11.3
Interior cigarette ads	65.4	55.6	52.6	-12.8
Interior menthol cigarette ads	52.6	41.4	40.6	-12.0
Cigars				
Exterior cigar ads	22.6	20.3	19.5	-3.1
Exterior flavored cigar ads	15.8	12.8	15.8	0.0
Interior cigar ads	28.6	30.8	27.8	-0.8
Interior flavored cigar ads	17.3	22.6	24.1	+6.8
Smokeless tobacco				
Exterior smokeless ads	2.3	3.0	0.8	-1.5
Interior smokeless ads	14.3	15.0	12.8	-1.5
Nicotine pouches				
Exterior nicotine pouch ads	6.8	6.0	6.5	-0.3
Interior nicotine pouch ads	12.8	13.5	12.8	0.0
E-cigarettes				
Exterior e-cig ads	13.5	11.3	12.0	-1.5
Exterior flavored e-cig ads	4.5	2.3	3.8	-0.7
Interior e-cig ads	17.3	18.8	18.0	+0.7
Interior flavored e-cig ads	1.5	4.5	5.3	+3.8

Changes in product availability, 2019-2023

Table 20 displays changes in product availability between 2021 and 2023. The availability of cigarettes and cigars remained relatively high, but there was also a slight increase in the availability of these products across the four-year period. Flavored cigars had the largest increase (+6.0 percentage points) in availability of any combustible product.

The availability of smokeless tobacco and nicotine pouches also modestly increased between 2021 and 2023. Flavored smokeless tobacco saw the largest increase (+8.3 percentage points) over this period. Hookah tobacco had a small increase in availability, seeing a 1.5 percentage point increase.

Table 20. Changes in product availability between 2021-2023 (n=133)

Product type	2021 %	2022 %	2023 %	Percentage Point Change 2021 vs. 2023
Cigarettes				
Cigarettes	93.2	95.5	96.2	+3.0
Menthol cigarettes	93.2	95.5	95.5	+2.3
Cigars/cigarillos				
Cigars/cigarillos	85.0	84.2	87.2	+2.2
Flavored cigars/cigarillos	80.5	84.2	86.5	+6.0
Smokeless tobacco				
Moist snuff SLT	24.8	24.1	26.3	+1.5
Wintergreen SLT	22.6	22.6	25.6	+3.0
Flavored SLT	14.3	20.3	22.6	+8.3
Tobacco-free nicotine pouches				
Nicotine pouches	18.8	19.5	21.1	+2.3
E-cigarettes				
Any e-cigarette	36.1	47.4	51.1	+15.0
Menthol e-cigarettes	19.5	30.8	39.1	+19.6
Mint e-cigarettes	19.5	31.6	39.1	+19.6
Flavored e-cigarettes	23.3	36.1	41.4	+18.1
Disposable flavored e-cigarettes	23.3	36.1	41.4	+18.1
Hookah				
Hookah tobacco	6.0	3.8	7.5	+1.5
No longer sells tobacco				
No tobacco sold	4.5	4.5	3.0	-1.5

E-cigarettes saw the greatest increase in availability from 2021 to 2023, largely due to the increase (+18.1 percentage points) in availability of disposable flavored e-cigarettes. Table 21 shows e-cigarette advertising and availability prior to the implementation of the e-cigarette flavor ban in 2019 compared to audits conducted in 2023, three years after the ban. While e-cigarette advertising decreased since 2019, there was a notable rise in overall product availability, mainly driven by an increase in availability of flavored e-cigarettes.

Table 21. Changes in e-cigarette advertising and availability between 2019-2023 (n=126)

	2019 %	2023 %	Percentage Point Change 2019 vs. 2023
Advertising			
Exterior e-cig ads	21.4	11.9	-9.5
Exterior flavored e-cig ads	9.5	4.0	-5.5
Interior e-cig ads	20.6	17.5	-3.1
Interior flavored e-cig ads	5.6	4.8	-0.8
Availability			
Any e-cig	43.7	50.8	+7.1
Menthol e-cigs	41.3	39.7	-1.6
Mint e-cigs	42.1	38.9	-3.2
Flavored e-cigs	38.9	41.3	+2.4

CONCLUSION AND RECOMMENDATIONS

Combustible tobacco products (cigarettes and cigars) remain the most available and advertised products in licensed tobacco retailers near high schools. Cigarettes were by far the most available and advertised tobacco product across all stores. Chain convenience stores often have a high number of cigarette ads (5 or more) which may be a function of the retail space available in these types of stores.

Cigars were the second most available and advertised tobacco product. Nearly all stores that sold cigars/cigarillos had a flavored variety available. In addition, the availability of flavored cigars and interior advertising of flavored cigars increased slightly between 2021 and 2023, Although both flavored and non-flavored cigars/cigarillos were more available in urban areas, advertising for both products were more often found in non-urban areas. Availability and advertising of cigars/cigarillos is especially concerning because cigars or cigarillos provide a cheaper alternative to cigarettes – it is not uncommon to find a two pack of cigars selling for as little as 99 cents – making them potentially more appealing to price-sensitive buyers such as youth. In addition, flavors mask the harshness and taste of tobacco which can also increase the appeal of flavored cigars. Continued monitoring of cigar/cigarillo advertising and availability is also

important in the context of legalized recreational sales of marijuana, available in New Jersey since April 2022 measure, and frequent co-marketing and co-use of marijuana with cigarillos.^{12,13}

Non-combustible tobacco products (smokeless tobacco, nicotine pouches, e-cigarettes) were more available and often advertised in non-urban areas. The availability of smokeless tobacco and nicotine pouches were similar, with smokeless tobacco being slightly more available. Interior advertising prevalence rates were identical, however exterior nicotine pouch advertising was far greater than exterior advertising of smokeless tobacco. These products were predominantly sold in chain convenience stores, more frequently located in non-urban areas. E-cigarettes were the most available and advertised non-combustible tobacco product and mimicked urban vs non-urban advertising trends of the other non-combustible products. Of note in 2023, there was the greater availability of flavored disposable e-cigarettes in urban compared to non-urban districts. Furthermore, flavored e-cigarette availability increased by 2.4 percentage points since 2019, meaning that flavored e-cigarettes were more widely available in our 2023 sample than in the year prior to the New Jersey e-cigarette flavor ban.

Another notable difference in tobacco product advertising between urban and non-urban district stores was the higher number of both exterior and interior ads in non-urban stores. Advertising prevalence for all tobacco products was substantially greater in non-urban district stores as well. Stores near urban district schools were more likely to be independently owned (“mom and pop”) stores or bodegas, which may not heavily advertise tobacco products given space constraints.

Our observations of New Jersey tobacco age of sale signage found that over half of stores (53.8%) displayed the non-mandatory age of sale signs provided by the New Jersey Department of Health. However, New Jersey age of sale signs required by law was observed in less than 10% of stores. Voluntary FDA age calculators were observed in over 20% of stores, a modest increase from 2022.

Comparing tobacco product advertising prevalence between 2021 and 2023, we found declines in advertising in most tobacco categories. Advertisements for nicotine pouches and smokeless tobacco decreased at the lowest rates. Availability of all tobacco products increased from 2021 to 2023. Most notably, overall e-cigarette availability and interior advertising of e-cigarettes increased by 15 and 3.8 percentage points, respectively, driven by a 18.1 percentage point increase in flavored disposable e-cigarettes.

This report provides important findings about the accessibility and promotion of various tobacco products near New Jersey high schools. The recent ban on the sale of flavored e-cigarettes in New Jersey, including menthol and mint, initially appeared to have the desired result of reducing availability of such products. However, flavored e-cigarette product availability has eclipsed pre-ban rates. The enactment of the law in April 2020, during the peak of the global COVID-19 pandemic, may have hampered early efforts to enforce the new law but it is unclear if enforcement of the e-cigarette flavor ban was ever fully and consistently implemented.

In April 2022, the U.S. Food and Drug Administration (FDA) formerly proposed a ban on menthol-flavored cigarettes and all characterizing flavors in cigars but the publication of a final rule is delayed. It will be critical to monitor the advertising and availability of menthol cigarettes as well as other tobacco and nicotine products, particularly those that may remain flavored, to identify potential shifts in the marketplace in response to such a ban.

We also assessed compliance with the recent law requiring NRT stock and signage in licensed retailers and found that only 12.8% of the stores in our sample sold NRT products and fewer stores provided printed notice of NRT product availability (3.8%) or NJ Quitline signage (5.8%). Efforts by community partners have attempted to educate retailers and share materials. We will continue to monitor in the accessibility of NRT in retailers over time.

RECOMMENDATIONS

Given recent government and industry action over the last several years, continued surveillance of point-of-sale tobacco product availability and advertising remains critically important. New Jersey led the nation by enacting several tobacco control policies well ahead of other states and localities including increased age of sale, restricting flavors in all e-cigarettes, limiting coupon redemption for all tobacco products, and requiring NRT at the point of sale but it falls short in ensuring uniform compliance with such policies. Despite the state's 2020 ban on sales of flavored e-cigarettes, the availability of flavored e-cigarettes returned to pre-ban levels by 2023. For such laws to effectively deter tobacco distributors and retailers, they must know the laws exist and believe these laws are enforced.

In addition to the state law, the FDA has not yet authorized the sale of any flavored e-cigarette and continue to take compliance action on the distribution or sale of unlawfully marketed products, including flavored e-cigarettes. For example, the Clifton NJ-based distributor of Lava Vapes received a warning letter from the FDA in September 2023 to discontinue marketing illegal e-cigarette products.¹⁴ At a minimum, local enforcement officials can leverage FDA guidance and warning letters to monitor, educate, and fine retailers in their area that continue to sell illegal products.

If we hope to make further reductions in youth and adult tobacco use, we must work to change the tobacco retail environment with a focus on the most dangerous products, cigarettes and cigars. There are various place and product-based strategies shown to be effective in reducing youth access including reducing tobacco retailer density (e.g., by volume or proximity to schools), store-type sales restrictions (i.e., selling only in adult-only facilities, banning sales in pharmacies, etc.), restrictions on cigar flavors and packaging, and increased tobacco taxes.^{15,16,17,18} The industry continues to innovate and offer a variety of flavors, packaging, and product types, particularly in the area of cigars. Efforts to reduce cigar use should keep pace with

other strong efforts to reduce cigarette use including high prices, minimum packaging, and flavor restrictions.

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