Systematic Surveillance of Rhode Island's Retail Environment to Audit Point-of-Sale Tobacco Advertising, Placement, and Promotion: 2012

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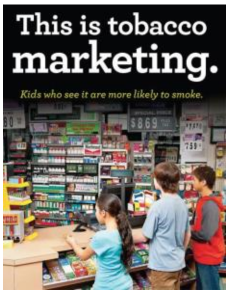
What's the problem?



- Tobacco industry's marketing budget vs. public health resources
- Tobacco marketing concentrated in the retail environment
- Exposure increases risk of youth use
- Emerging products attract youth (e.g. flavored little cigars)
- Differential exposure to tobacco marketing ≠ health equity

"Eye-level is buy-level"

- >80% of smokers start before 18
- RI youth (cigarette) smoking rate is 8.0%*
- RI is 1 of 4 states where youth cigar, smokeless, or spit tobacco use surpasses cigarette use*
- RI has the highest self-reported retail youth buy rate in the country (28%)*

*RI High School YRBS, 2013

Rhode Island's next frontier

- Point-of-sale (POS) strategies are next frontier for states with advanced tobacco control initiatives

Reduce exposure to tobacco marketing and products by restricting tobacco retailer density

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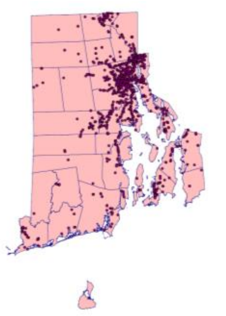
Prevent tobacco initiation among youth

- First step is to audit statewide tobacco retail environment

What is already known about RI's retail environment?

- ~1300 licensed tobacco retailers concentrated in urban areas
- Lower-income neighborhoods more likely to be exposed to:
  - Higher retail density
  - More price promotions
  - More convenience stores
- 2012 success: **Providence** (banned flavored products and price promotions, e-cig license)



What did we want to do?

- Prevent youth from being exposed to tobacco marketing
- Engage stakeholders in public health action to protect youth from tobacco marketing
- Monitor exposure to tobacco marketing in RI communities

What did we want to know?

1. What kinds of emerging tobacco products are available?
2. Are flavored products available?
3. Are tobacco products placed on the counter?
4. Are there tobacco price promotions?
5. How many retailers are close to schools?

Methods - Study Design

- Retail store surveillance – audit of tobacco products, placement, promotion, and price (4Ps)
- Convenience sample of licensed tobacco retailers
- 36 of 39 RI towns sampled (Providence, New Shoreham, and North Kingstown excluded)
- 16 community partners collected data
- Program-created survey tool

Sampling Frame

- Novel work at the time; TCP consulted with CDC
- 1,283 licensed tobacco retailers in RI
  - Towns with >40 stores: random selection of 50%
  - Towns with <40: 100% surveyed
- 671 stores selected for sampling
- **501 stores for final analytic sample**

Survey Tool

- TCP developed a 2-page Store Observation survey tool and User Guide
  - Type of emerging product (little cigar, cigarillos, snus, snuff, dissolvables)
  - Product price, flavor, brand
  - Placement of product (on counter or behind counter)
  - Type of store
- TCP provided data collection training to partners
- Survey informed by previous tools (i.e. Store Alert Training Guide)

Data Collection

- Participatory process with 16 tobacco control partner agencies
- Each agency assigned an equal number of stores with pre-printed address labels for each survey
- Survey staff visited stores with paper surveys
- Data collection completed in one month (April 2012)
- Survey staff submitted paper surveys to TCP staff

Data Analysis

- Survey data manually entered into Excel spreadsheet
- Missing data procedures developed
- Frequencies and cross-tabs (Stata)
  - Number of stores with emerging products, flavored products, price discounts, on-counter products
  - Cross-tabulated by store type (national or local)
- Mapping and spatial analysis (ArcGIS)

Primary Results

- Prevalence of emerging products:
  - 58% had flavored Cheyenne little cigars
  - 62% had flavored cigarillos
  - 60% had flavored snus
  - 52% had flavored snuff
- 77% (n=384) of retailers were local stores; 23% (n=117) were national stores
- 27% (n=133) were small markets or convenience stores
- Emerging products more prevalent at local stores

Flavored products more prevalent at local stores

Tobacco Product	Total Number Stores Responded N	Total Number Stores with Tobacco Product Available n (%)	Number of Local Stores with Product Available n (%)	Number of National Stores with Product Available n (%)
Little Cigars (flavored)				
Cheyenne	274	**160 (58.4%)**	**155 (96.9%)**	5 (3.1%)
Swisher Sweets	190	44 (23.2%)	**29 (65.9%)**	15 (34.1%)
Other Little Cigars	135	39 (28.9%)	**28 (71.8%)**	11 (28.2%)
Cigarillos (flavored)				
Swisher 6-pack	217	92 (42.4%)	**52 (56.5%)**	40 (43.5%)
Swisher single pack	213	100 (46.9%)	**64 (64.0%)**	36 (36.0%)
Other Cigarillos	221	**139 (62.9%)**	**121 (87.1%)**	18 (12.9%)
Dissolvables (flavored)				
Camel Orbs	152	1 (0.7%)	1 (100%)	0
Ariva	162	16 (9.9%)	0	16 (100%)
Other Dissolvables	143	1 (0.7%)	0	1 (100%)
Snus (flavored)	219	131 (59.8%)	**107 (81.7%)**	24 (18.3%)
Snuff (flavored)	179	93 (52.0%)	**86 (92.5%)**	7 (7.5%)

Products more likely to be on the counter in local stores (n=51)

Tobacco Product	Total Number Stores Responded N	Total Number Stores with Product On-the-Counter n (%)	Number of Local Stores with Product Available n (%)	Number of National Stores with Product Available n (%)
Little Cigars				
Cheyenne	194	12 (6.2%)	**12 (100%)**	0
Swisher Sweets	97	3 (3.1%)	**3 (100%)**	0
Other Little Cigars	61	5 (8.2%)	**5 (100%)**	0
Cigarillos				
Swisher 6-pack	139	6 (4.3%)	**6 (100%)**	0
Swisher single pack	102	14 (13.4%)	**14 (100%)**	0
Other Cigarillos	156	24 (15.4%)	**23 (95.8%)**	1 (4.2%)
Dissolvables				
Camel Orbs	1	0	---	---
Ariva	17	0	---	---
Stonewall	0	---	---	---
Other Dissolvables	1	0	---	---
Snus	132	2 (1.52%)	**2 (100%)**	0
Snuff	102	3 (2.94%)	**3 (100%)**	0

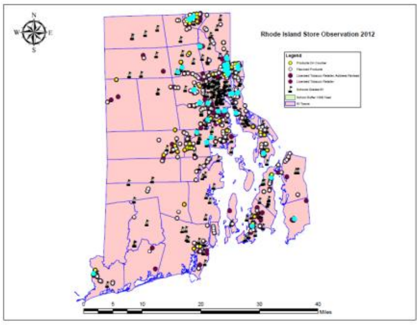
Price promotions more frequent at local stores

Tobacco Product	Total Number of Stores Responded N	Total Number of Stores with Special Offers Available n (%)	Local Stores with Special Offers Available n (%)	National Stores with Special Offers Available n (%)
Little Cigars				
Special price	451	50 (11.1%)	**41 (82.0%)**	9 (18.0%)
Multi-pack discounts	286	30 (10.5%)	**26 (86.7%)**	4 (13.3%)
Free gifts	293	0	**---**	---
Cigarillos				
Special price	452	63 (13.9%)	**51 (80.9%)**	12 (19.1%)
Multi-pack discounts	297	40 (13.5%)	**34 (85.0%)**	6 (15.0%)
Free gifts	295	0	**---**	---
Dissolvables				
Special price	446	1 (< 1%)	**1 (100%)**	0
Multi-pack discounts	260	0	**---**	---
Free gifts	270	0	**---**	---
Snus				
Special price	449	9 (2.0%)	**8 (88.9%)**	1 (11.1%)
Multi-pack discounts	263	2 (<1 %)	**1 (50.0%)**	1 (50.0%)
Free gifts	274	0	**---**	---
Snuff				
Special price	448	7 (1.6%)	**7 (100%)**	0
Multi-pack discounts	261	2 (< 1%)	**2 (100%)**	0
Free gifts	271	0	**---**	---

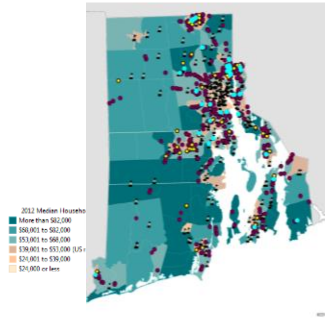
Tobacco retailer proximity to schools

- 12% (n=58) within 1000 feet of schools (grades 6+)
- 75% of retailers close to schools are local stores
- Dense, urban areas at higher risk (*=RI core city)
  - **Central Falls (n=8)***
  - Cranston (n=7)
  - **Pawtucket (n=7)***
  - **Woonsocket (n=7)***
  - East Providence (n=7)

Spatial Summary of Project Findings



Retail Sample and Median Household Income



Conclusions

- Flavored, inexpensive, and emerging products are available in local stores frequented by youth
- Products are placed where youth can see them
- Schools in lower-income communities are more likely to be within the 1000 foot buffer
- Surveillance of the store environment is feasible

Implications

Store observation surveillance can:

- Mobilize stakeholders concerned about youth exposure to tobacco in their neighborhoods
- Monitor tobacco industry marketing trends and tactics
- Collect data to support policies that restrict the number, location, and density of tobacco retailers
- Identify most needed and relevant point-of-sale interventions

Limitations

- Data quality (missing or invalid data)
- Providence excluded from sampling frame
- Not all retailers observed
- Intended repetition and improvement stalled due to staff transition

Project Successes

- TCP and stakeholders better understood the retail environment
- Effectively mobilized communities and engaged stakeholders in participatory research
- Published as a CDC Success Story
- Recognized as formative work in retail observation: program experiences aided STARS development

Next Steps

- Repeat surveillance with new tools and build on lessons learned
- Increase use of GIS maps and spatial analysis
- Develop feedback loops to share results with stakeholders
- Provide TA to stakeholders to support local ordinances to restrict tobacco marketing at the point-of-sale

Acknowledgments

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