

Tobacco Sales to Minors: State Differences in Underage Compliance Check Inspections, 2014

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Background

- Tobacco retailers play an important role in youth access to tobacco; roughly 20% of underage high school students aged 15-17 obtain their cigarettes from purchasing them at a store.
- Under the 2009 Family Smoking Prevention and Tobacco Control Act, the Food and Drug Administration (FDA) has authority to enforce minimum age requirements of tobacco purchases.
- FDA conducts compliance checks of retailers by sending in underage youth to attempt to purchase tobacco products.
- Little research exists examining national outcomes of such compliance efforts.

Methods

- Publicly available national FDA inspections results from January 1-December 31, 2014 examined proportion of violations found in each state
- State-level characteristics: (1) youth smoking prevalence, (2) percentage living in poverty, (3) historically tobacco-producing states, (4) license requirement policies for cigarette retailers, (5) requirements for retailers to post signs at or near the point-of-sale stating that selling tobacco products to minors is illegal, and 6) Synar rates
- Used Spearman correlation to assess associations between state level characteristics and proportion of violations by state

Results

- 77,018 youth compliance check inspections occurred during 2014 in 48 US States and DC (NM and NV completed none)
- Warning letters for a violation were issued in 12.2% of inspections (n=9,406)
- The overall number of warning letters issued per state ranged from <10 in six states and DC to 659 in Washington (M = 184, SD = 211)
- The percentage of total warning letters issued for youth access violations ranged from 0% in Alaska to 19.4% in Michigan (M = 10.6%, SD = 6.8%)
- The proportion of all US inspections completed and the proportion of the US population were highly correlated (rho = 0.56, p < .0001)
- Inspections within a state were correlated with each other (ICC=0.16)
- State Synar rates and state licensing of tobacco retailers correlated with compliance checks

Table 1. Correlations of state violation FDA compliance checks involving a minor, 2014

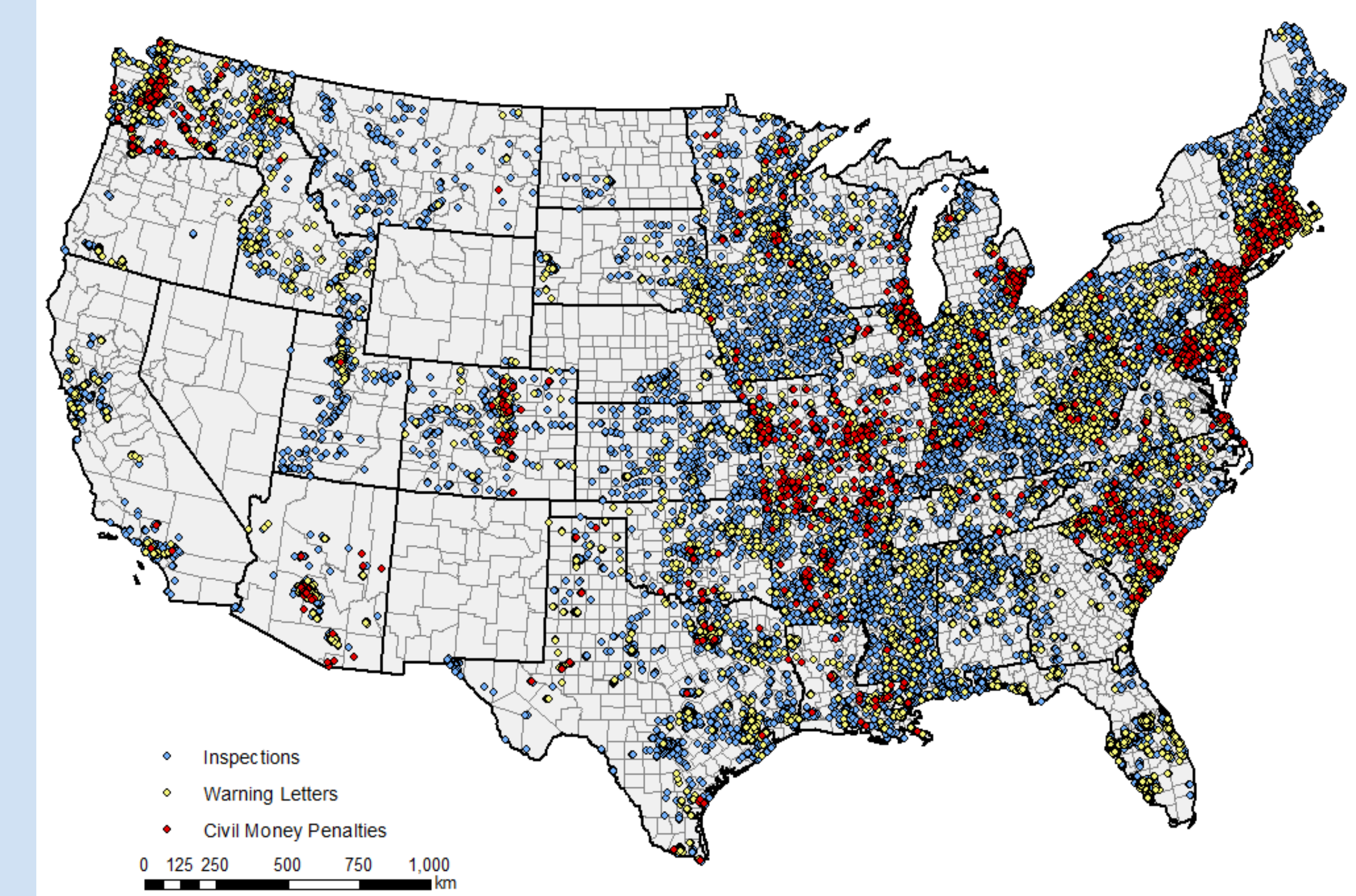
Variable	Pearson correlation (r)	p-value
Synar rate	0.45	<.01
Youth smoking rate	0.20	.16
Poverty rate	0.007	.96
Tobacco-producing state	0.08	.58
License requirement	-0.35	.01
Sign posting requirement	-0.03	.85

Results

Table 2. State inspections and warning letters for FSPTCA violations, 2014

State	Inspections	Violations			% of total violations	% of all US inspections	% of US population
		Warning letters	Civil money penalties	Total violations			
AK	28	0	0	0	0	0.04	0.2
AL	1046	55	0	55	5.3	1.4	1.5
AR	2060	117	38	155	5.7	2.7	0.9
AZ	1306	155	25	180	11.9	1.7	2.1
CA	1965	57	3	60	2.9	2.6	12.2
CO	1694	159	29	188	9.4	2.2	1.7
CT	1357	146	104	250	10.8	1.8	1.1
DC	27	4	1	5	14.8	0.04	0.2
DE	521	21	0	21	4.0	0.7	0.3
FL	4011	592	0	592	14.8	5.2	6.2
GA	915	88	0	88	9.6	1.2	3.2
HI	145	10	0	10	6.9	0.2	0.4
IA	1152	49	4	53	4.3	1.5	1.0
ID	1451	151	5	156	10.4	1.9	0.5
IL	1368	161	73	234	11.8	1.8	4.0
IN	4773	463	64	527	9.7	6.2	2.1
KS	1504	68	0	68	4.5	2.0	0.9
KY	1552	48	0	48	3.1	2.0	1.4
LA	1219	105	24	129	8.6	1.6	1.5
MA	4801	502	46	548	10.5	6.2	2.1
MD	1240	202	112	314	16.3	1.6	1.9
ME	1672	16	0	16	1.0	2.2	0.4
MI	1889	367	145	512	19.4	2.5	3.1
MN	3215	240	23	263	7.5	4.2	1.7
MO	2672	404	177	581	15.1	3.5	1.9
MS	2717	120	2	122	4.4	3.5	0.9
MT	581	6	1	7	1.0	0.8	0.3
NC	1015	126	14	140	12.4	1.3	3.1
ND	57	1	0	1	1.8	0.07	0.2
NE	287	7	0	7	2.4	0.4	0.6
NH	316	39	6	45	12.3	0.4	0.4
NJ	2640	404	70	474	15.3	3.4	2.8
NM	0	.	.	.	.	0	0.7
NV	0	.	.	.	.	0	0.9
NY	169	6	0	6	3.6	0.2	6.2
OH	783	149	0	149	19	1.0	3.6
OK	848	120	15	135	14.2	1.1	1.2
OR	319	36	0	36	11.3	0.4	1.2
PA	4148	526	60	586	12.7	5.4	4.0
RI	951	93	11	104	9.8	1.2	0.3
SC	3672	605	117	722	16.5	4.8	1.5
SD	583	96	0	96	16.5	0.8	0.3
TN	786	112	9	121	14.2	1.0	2.1
TX	3744	290	21	311	7.7	4.9	8.5
UT	816	32	1	33	3.9	1.1	0.9
VA	879	95	17	112	10.8	1.1	2.6
VT	160	13	0	13	8.1	0.2	0.2
WA	5292	659	91	750	12.5	6.9	2.2
WI	304	37	14	51	12.2	0.4	1.8
WV	2344	309	21	330	13.2	3.0	0.6
WY	24	2	0	2	8.3	0.03	0.2

Figure 1. Location of inspections and resulting enforcement action by FDA



Limitations

- Neither our study design nor the available data permit causal inference or the reasons for state-level differences
- State contracts may lapse or not be in place during different periods of the year
- Direct comparisons between states are limited because there is no standard sampling technique.

Conclusions

- Wide variation existed in number of FDA underage compliance check inspections and proportion of violations across states
- State licensing laws need further evaluation
- Enforcement programs of minimum age requirements for tobacco purchase are an important part of comprehensive programs to prevent youth tobacco use
- Additional research should examine inspections protocols and determine if additional standardization might increase retailer compliance

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