

E-cigarette Tobacco Retail Licensing Laws: Variance Across US States as of January 1, 2020

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Objectives. To describe how US states and the District of Columbia regulate e-cigarette sales by examining e-cigarette-specific tobacco retail licensing (TRL) laws.

Methods. We coded 25 state-level e-cigarette TRL laws (effective as of January 1, 2020) for provisions we labeled as either “core” (e.g., presence of license terms, fees, and penalties) or “descriptive” (e.g., license fee amount and term length).

Results. Overall, 23 laws clearly defined a license term, 23 laws required a license fee, and 19 laws identified penalties for violations that included both license suspension and revocation. Fees widely ranged (\$5–\$1000 annually), and 8 laws did not explicitly direct fees toward TRL administration or enforcement. No law required that retailers comply with all local, state, and federal tobacco or e-cigarette laws.

Conclusions. Most laws contained core TRL provisions. Several laws, however, had minimal license fees and did not direct fees toward administration or enforcement. As youth e-cigarette use increases, more states should consider establishing e-cigarette TRL laws or incorporating provisions into existing TRL laws. (*Am J Public Health.* 2020;110:1380–1385. doi:10.2105/AJPH.2020.305771)

Since their introduction into the United States, there has been growing debate within the public health community regarding the risks and benefits of electronic cigarettes (e-cigarettes).¹ The discourse has become more pronounced as rates of e-cigarette use among youths continue to grow at epidemic levels.^{2,3} In 2019, past 30-day e-cigarette use among high school students was 27.5%.⁴ This is particularly concerning because most e-cigarettes contain nicotine, which can harm adolescent brain development.^{5,6} Furthermore, e-cigarette use is associated with smoking initiation among young people who have not previously used tobacco products, thus exposing adolescents who otherwise would not have been exposed to the harms of combustible tobacco use.^{5–7} Although e-cigarettes may have the potential to help smokers who fully switch from combustible tobacco use, exclusive use of these devices is low among adults.⁸ Additionally, no e-cigarette has been approved by the US Food and Drug Administration (FDA), and long-term health effects of e-cigarettes are unknown.^{6,9}

Tobacco control policies have reduced the prevalence of tobacco use in the United States. However, until recently, policies have largely focused on combustible products.^{10,11} The US surgeon general has called on state and local governments to implement population-level strategies to reduce e-cigarette use among youths and young adults.⁵ State and local jurisdictions have responded by adopting various policies to regulate e-cigarettes, especially given insufficient federal action by the FDA, including a significantly delayed premarket review process allowing e-cigarettes to be sold without formal review of product risks and benefits.^{12–16}

One policy strategy the surgeon general recommends to jurisdictions is e-cigarette

tobacco retail licensing (TRL) laws, which require retailers to obtain a license to sell e-cigarettes.³ Research demonstrates that local TRL laws—particularly those requiring license fees that sufficiently fund TRL law administration and enforcement—are associated with reductions in youth access to and use of tobacco products, in part by facilitating retailer compliance with other tobacco control laws, including the minimum sales age.^{17–19} Comprehensive state-level e-cigarette TRL laws may have a similar impact; however, the extent to which current laws include recommended provisions is not well documented.⁵ According to the US Centers for Disease Control and Prevention (CDC) STATE System, as of January 1, 2020, only 24 states and the District of Columbia had laws in effect requiring a license for over-the-counter retail sales of e-cigarettes, whereas 38 states and the District of Columbia required a license for over-the-counter sales of other tobacco products.²⁰

The American Lung Association (ALA) recommends (and “grades” highest) local TRL laws that (1) require licenses to be renewed annually; (2) provide for penalties, including license suspension and revocation; (3) make any violation of a local, state, or federal tobacco law a license violation; and (4) require retailers to pay an annual fee that sufficiently funds TRL administration and enforcement.²¹ Two additional organizations—ChangeLab Solutions (CLS) and Public Health Law Center (PHLC)—offer recommendations similar to those of the ALA; CLS

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both products that contained nicotine and products that did not, (2) did not require that products be made of or derived from tobacco, (3) defined e-cigarettes as tobacco products or explicitly included them in the definition of conventional tobacco products, and (4) fully included both e-cigarette devices and e-liquids or cartridges.²⁴

Coders also noted whether e-cigarette TRL laws fell under the same license requirements as other tobacco products and whether retailers who exclusively sell e-cigarettes (i.e., do not sell any other tobacco products) are required to obtain a separate stand-alone e-cigarette-specific license.

RESULTS

The 25 coded e-cigarette TRL laws were distributed across the 4 US Census regions and in states with varying levels of past 30-day e-cigarette use among youths and adults (Table 1; Figure A, available as a supplement to the online version of this article at <http://www.ajph.org>). Laws were passed between May 2012 and July 2019, with the highest number of laws adopted in 2015 (n = 6) and 2019 (n = 6; Table 2; Table B).

States differed in whether they included e-cigarettes in TRL laws for other tobacco products. Eighteen laws (72%) required retailers to obtain a single license to sell e-cigarettes or other tobacco products. One law (4%) required retailers to obtain a separate e-cigarette-specific “endorsement” in addition to the general tobacco license. The 6 remaining laws (24%) required e-cigarette retailers to obtain a license to sell e-cigarettes separate from the license required to sell other tobacco products. Additional nuances existed; 2 of the 18 laws requiring a single license for the sale of e-cigarettes and other tobacco products also required retailers who exclusively sold e-cigarettes (e.g., vape shops) to obtain an e-cigarette-specific license instead of a general tobacco license.

Core Elements

Table 2 and Table B present data on the 6 core elements to administer a licensing program. Of the 25 coded laws, 23 (92%) clearly defined a license term and 23 (92%) required a license fee. Although 17 laws (68%) explicitly directed the license fee toward law

TABLE 1—State-Level Over-the-Counter E-Cigarette Tobacco Retail Licensing (TRL) Laws Effective as of January 1, 2020, by Prevalence of Past 30-Day E-Cigarette Use Among Youths and Adults: United States

State	Past 30-Day E-Cigarette Use, %		E-Cigarette TRL Law
	Adults	High School Students	
AK	3.5	15.7	✓
AL	5.7	...	✓
AR	4.9	13.9	✓
AZ	5.3	16.1	...
CA	3.0	17.3	✓
CO	5.3	26.2	...
CT	3.2	...	✓
DC	2.3	...	✓
DE	4.8	13.6	...
FL	4.3	...	...
GA	4.4	...	...
HI	4.7	25.5	✓
IA	4.0	9.0	✓
ID	4.6	14.3	...
IL	4.4	13.2	...
IN	6.0	...	✓
KS	4.6	10.6	✓
KY	6.1	14.1	...
LA	4.5	12.2	✓
MA	3.3	20.1	...
MD	3.3	13.3	✓
ME	4.1	15.8	✓
MI	4.9	14.8	...
MN	3.6	...	✓
MO	5.1	10.9	...
MS	4.9	...	...
MT	3.9	22.5	✓
NC	4.6	22.1	...
ND	4.3	20.6	...
NE	3.8	9.4	✓
NH	4.6	23.8	✓
NJ	4.4	...	...
NM	4.9	24.7	...
NV	5.4	15.5	✓
NY	3.8	14.5	✓
OH	5.3	...	✓

Continued

TABLE 1—Continued

State	Past 30-Day E-Cigarette Use, %		E-Cigarette TRL Law
	Adults	High School Students	
OK	7.1	16.4	...
OR	4.4	...	...
PA	4.7	11.3	✓
RI	4.9	20.1	✓
SC	4.1	11.9	...
SD	3.9	...	...
TN	5.8	11.5	...
TX	4.7	10.3	...
UT	5.1	7.6	✓
VA	4.9	11.8	...
VT	3.0	12.0	✓
WA	4.3	...	✓
WI	4.3	11.6	...
WV	5.7	14.3	...
WY	5.7	...	...

Note. ✓ = state-level e-cigarette TRL law in place; ... = state-level e-cigarette TRL law not in place. Ellipses indicated data are not available. New Jersey was excluded from the study.

Source. Youth data are from the 2017 Youth Risk Behavior Surveillance System; adult data are from the 2017 Behavior Risk Factor Surveillance System.

administration or enforcement, 3 of these laws directed fees toward funds that administer the TRL law, such as a tobacco tax enforcement fund, but did not specify what proportion should be allocated toward TRL administration and enforcement. Of the 8 remaining laws, 1 (4%) did not require a license fee, 3 (12%) directed fees to funds that may or may not be used for administration or enforcement of the law (e.g., state general fund), and 4 (16%) did not seem to specify how license fees should be used, so it is possible (but not certain) that fees were intended for administration or enforcement. Nineteen laws (76%) included both license suspension and revocation as penalties for license violations, and all laws except for Minnesota’s (96%) clearly identified the agency responsible for administering or enforcing the law. Minnesota’s law is unique, relying on municipalities within the state to administer TRL programs for e-cigarettes and other tobacco products, including a local determination of the administration or enforcement agency, license fees, license terms, and penalties above those outlined in the state statute.

TABLE 2—Presence of Core Elements for an Administratively Sufficient Over-the-Counter E-Cigarette Tobacco Retail Licensing (TRL) Law Among State-Level Over-the-Counter E-Cigarette TRL Laws Effective as of January 1, 2020: United States

Provision ^a	% of States With the Provision
License term clearly specified.	92
License fee clearly required.	92
Fee explicitly directed to administration or enforcement.	68
Administration or enforcement agency clearly described.	96
Law requires compliance with all local, state, and federal tobacco or e-cigarette laws.	0
Penalties for violating license terms or conditions include suspension and revocation.	76

Note. New Jersey was excluded from the study. Detailed information is available in Table B, available as a supplement to the online version of this article at <http://www.ajph.org>.

^aEnactment dates ranged from May 2012 to July 2019.

Descriptive Elements

Table 3 and Table C present results for the descriptive elements. The 25 coded laws exhibited wider variability among these provisions compared with the core elements.

License term and fees. The most common license term, present in 20 laws (76.0%), was 1 year. Of the 6 remaining laws, 5 specified longer license terms or a range between 6 and

36 months, depending on the license type (e.g., state or local licenses in Utah) and retailer compliance record (e.g., those in “good standing” in Louisiana). As previously noted, the license term in Minnesota is determined by municipalities.

License fees varied substantially. For example, no license fee was charged in Alabama, but Montana charged retailers \$5 annually,

Connecticut charged retailers \$475 for an initial license and \$400 for an annual renewal, and Ohio charged retailers \$125 annually for exclusive e-cigarette licenses or \$1000 annually for e-cigarette and other tobacco product licenses. Two laws did not identify a specific fee amount: Maine required the fee to be determined annually by rule-making, and license fees in Minnesota were determined by municipalities.

Other state tobacco control laws. No coded laws explicitly required that e-cigarette retailers comply with all local, state, and federal e-cigarette or tobacco-related laws.

Penalties for violations. All 25 coded laws specified fines for selling e-cigarettes without a retail license. Fines ranged widely, including \$50 for a first offense (with repeated offenses escalating to \$2500) in Louisiana and a range of \$5000 to \$35 000 specified for any violation in New York. For violating other license terms (e.g., selling to minors, failure to renew an expired license), 22 laws (88%) included license suspension and 20 laws (80%) included license revocation as potential penalties.

Does not expressly preempt local e-cigarette laws. Excluding the District of Columbia, which does not contain any lower jurisdictions, 18 laws (75%) did not expressly preempt local e-cigarette licensing laws.

Comprehensive e-cigarette definition. Twenty laws (80%) included nicotine and nonnicotine products in the e-cigarette definition. No laws required that e-cigarette products be made of or derived from tobacco. Nine laws (36%) explicitly included e-cigarettes in their definition of tobacco products, and 22 laws (88%) fully included e-cigarette devices and e-liquids or cartridges in the relevant e-cigarette definitions.

TABLE 3—Descriptive Elements of State-Level Over-the-Counter E-Cigarette Tobacco Retail Licensing (TRL) Laws Effective as of January 1, 2020: United States

Provision	Range or % Among All States
License renewal term, mo	6–36
License fee amount, \$ ^a	0–1000
Fine for operating without a license, \$	< 50/day–35 000 ^b
License suspension penalty	88
License revocation penalty	80
No express preemption of local e-cigarette licensing laws ^c	75
E-cigarette definition includes nicotine and nonnicotine products	80
E-cigarette definition does not require e-cigarettes to be made of or derived from tobacco	100
E-cigarettes explicitly included in the existing definition of tobacco products	36
Relevant e-cigarette definitions fully include both e-cigarette device and e-liquids or cartridges	84

Note. New Jersey was excluded from the study. Detailed information is available in Table C, available as a supplement to the online version of this article at <http://www.ajph.org>.

^aFee amount is per license term.

^bFines ranged from less than \$50 daily (Connecticut) to a total fee of \$5000 to \$35 000 (New York).

^cIn states without express preemption, implied preemption may still be a barrier to local e-cigarette licensing. Additionally, the scope of express preemption may vary in states where some form of express preemption is present.

DISCUSSION

There are several key findings from this review of state-level e-cigarette TRL laws. Whereas 38 states and the District of Columbia had TRL laws in effect for other tobacco products, only 24 states and the District of Columbia had laws in effect requiring a license for over-the-counter sales of e-cigarettes.²⁰ Considering that e-cigarettes are the most commonly used tobacco product among youths and young adults, it is imperative that states work to close this licensing

gap. Additionally, there were significant gaps among existing e-cigarette TRL laws. Among the 25 laws reviewed, none had all 6 core elements, and about half had 5 of the 6. Most of the laws could be strengthened by requiring compliance with all local, state, and federal e-cigarette or tobacco laws, by directing license fees to administration and enforcement, and by including suspension and revocation as penalties for license violations.

Our study also found that fines and fees within e-cigarette TRL laws differed substantially. Although all coded laws identified fines for operating without a license, low fines, such as those that do not exceed the cost of the license, are particularly concerning, as they do not serve as a deterrent to operating without a license. Similarly, sufficient license fees are central to adequately administering and enforcing an effective TRL law.²¹ License fees should recover the costs of administering the licensing program to avoid insufficient enforcement or diversion of funds from other sources to cover the cost of enforcement.²⁷ However, license fees varied from minimal (\$5) to comparatively larger quantities (\$500), which could more adequately cover administration costs depending on program scale. Furthermore, nearly a third of coded laws did not explicitly direct fees to law administration or enforcement, leaving compliance potentially largely unchecked. The ALA emphasizes the importance of a license fee that is sufficient to administer and enforce local TRL laws; a local law that does not have a sufficient license fee receives a failing grade regardless of its other components.²¹ When determining sufficient fees for their states, lawmakers should look to adequately cover the costs needed for administration and enforcement (e.g., human resources, education of retailers, compliance checks and inspections).

Current and future TRL laws could additionally be improved by including explicit nonpreemption language and all 4 components for comprehensive e-cigarette definitions outlined in our study. One fourth of coded laws included express preemption, which limits the ability of municipalities to establish stronger local laws (e.g., including license suspension and revocation as penalties) and respond to community needs (e.g., retailer density restrictions). Additionally, the proportion of coded laws that included all elements for a comprehensive e-cigarette

definition was low (28%), which can create different regulatory requirements for substantially similar products. For example, taxes or sales restrictions that build off the licensing structure may tax or restrict the sale of nicotine-containing products, but not nicotine-free e-cigarettes.²⁴ Furthermore, excluding e-cigarettes altogether from the tobacco product definition may preclude e-cigarette-related products from regulations that govern other tobacco product sales. These gaps in product coverage can undermine the law's effectiveness by creating consumer purchasing loopholes, particularly given the range of e-cigarette products on the marketplace.^{24,25} Additionally, administration and enforcement efforts may become more complicated if agencies need to consider multiple, mutually exclusive e-cigarette product categories versus a comprehensive definition subjecting e-cigarettes and conventional tobacco products to the same set of regulations.²⁴

Licensing laws also could facilitate the creation of a known list of tobacco outlets, which can serve multiple public health functions.²³ Although not necessarily mandated by e-cigarette TRL laws, a publicly available list is a resource that can facilitate the sampling design for policy evaluation studies, led either by citizen-science groups or academic institutions.²⁸ Additionally, such lists can be directly utilized by agencies to monitor compliance with federal, state, and local tobacco control-related rules, particularly the new federal law raising the age of tobacco sales to 21 years.^{23,29–31} In this study, no states required licensed retailers to comply with all federal, state, and local e-cigarette or tobacco control laws. Our results indicate that moving forward, state lawmakers should include this language and require publication of a list of licensed outlets to optimize monitoring compliance and strengthen enforcement of e-cigarette- and tobacco-related laws.

Our research builds on the limited existing literature and provides direction for future examination of TRL laws and their policy implications. Research on the impact of local TRL laws shows that the strength of the law matters. A California study rated the strength of local TRL laws using the ALA grading system and found that between baseline and follow-up, strong TRL laws, compared with weak TRL laws, were associated with lower odds of cigarette initiation, e-cigarette

initiation, and past 30-day e-cigarette use.¹⁹ Another study evaluating Pennsylvania's e-cigarette TRL law found that adolescent e-cigarette use declined by 21.6% the year after the law was adopted and by 5.2 percentage points compared with adolescents in New York State, which did not have an e-cigarette TRL law at the time of the study.¹⁷ Together, these studies highlight the potential for e-cigarette TRL laws to reduce e-cigarette use. Our current analysis furthers this existing research by identifying components of state-level e-cigarette TRL laws showing variance between states on several key measures. Our results can inform similar policy studies examining the strength of laws and their impact on tobacco use behaviors over time.

Limitations

There are limitations to our study. First, we only assessed laws requiring a retail license for over-the-counter sales of e-cigarettes. States that required a license to sell only some e-liquids or covered only delivery sales of e-cigarettes were not included. The narrow scope of these laws was not well suited to our comprehensive coding scheme. Second, because the ALA guidelines focus on local laws and are not e-cigarette specific, we tailored variables to examine state- and e-cigarette-specific laws. Given the changing policy landscape at the local level and the great number of local laws, it was not possible to examine local e-cigarette TRL laws individually; future research can examine local-level laws, especially in jurisdictions with no state-level law. Third, we were unable to determine if license fees sufficiently covered administration and enforcement costs. Instead, we examined whether a license fee was required and was clearly directed toward law administration or enforcement.

Additionally, we did not examine whether a license fee was required for each retail location. Some states may allow retailers to operate several retail locations under 1 license or license fee, whereas other states may require retailers to obtain a license or pay a separate license fee for each retail location. The license fee can thus be structured in different ways that may have public health implications. Despite these limitations, results from this study provide a snapshot of the current landscape of state-level e-cigarette TRL laws in the United States and can lay the

foundation for future policy surveillance and evaluation studies.

Public Health Implications

E-cigarette TRL laws are an underused tobacco control policy strategy that can help to regulate the retailer environment and ultimately reduce prevalence of tobacco use among youths and young adults. Given that about half of US states had e-cigarette TRL laws in effect, states should consider adopting comprehensive TRL laws that cover e-cigarettes and other tobacco products. With recent data indicating that 27.5% of US adolescents vape, it is even more important to regulate the sale of e-cigarettes.⁴ Additionally, with recent vaping-related deaths and illnesses caused by vitamin E acetate and THC use, states may be looking to enact new e-cigarette TRL laws.³² Our findings can support advocates and policymakers in determining what specific components may be necessary for an effective TRL law and can better inform more comprehensive policies that may ultimately lead to lower tobacco use rates. **AJPH**

CONTRIBUTORS

E. M. Donovan, S. N. Perks, and D. Huang coded the laws described in this study, with supervision from M. Patel. M. Patel, E. M. Donovan, S. N. Perks, and L. Czapliski drafted the article. All authors collaborated on the interpretation of findings and placement in context, were involved in the conceptualization of the study and design of analyses, and were responsible for review and refinement of the article's content.

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CONFLICTS OF INTEREST

The authors have no conflicts of interest to disclose.

HUMAN PARTICIPANT PROTECTION

Because human participants were not involved in this research, institutional review board approval was not needed.

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