Rebecca Mashni Honors Thesis

Analysis of State Level Electronic Cigarette Policies

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ABSTRACT

The increase in electronic cigarette (e-cigarettes) use in the United States, along with the uncertainty of the health effects resultant of use, have caused a number of states and local municipalities to regulate these products like cigarettes. Many policies have been passed to regulate youth access to e-cigarettes and limit e-cigarette use in public places. In this paper, I estimate the reach of e-cigarette inclusion in smoke-free and youth access laws, estimate the rate at which e-cigarettes are taxed and if they are taxed at the same rates as cigarettes, and describe the influence of the tobacco industry on e-cigarette state laws. Each statewide policy regulating e-cigarettes including youth access, smoke-free laws and any other statewide limitation, was analyzed. Certain characteristics of the policies were noted, including the extent of the regulations, language used to classify e-cigarettes, and whether or not the policy preempted local regulations. Tax codes were also analyzed for specification on e-cigarettes. While 40 states have adopted youth access laws for e-cigarettes, only 5 of these laws use the ideal public health language, 17 laws use industry language and the remainder use something different. Only 3 states have included e-cigarettes in smoke-free laws, and only 2 states have created tax codes specific to e-cigarettes. These findings suggest that e-cigarette companies, including large cigarette manufacturers, are influencing public health policy in order to maintain favorable terms for the industry.

BACKGROUND

Electronic cigarettes, often referred to as e-cigarettes, are battery powered nicotine delivery products that heat a mixture of nicotine, flavoring, and other chemicals to create a vapor that is inhaled by the user[1]. Electronic cigarettes are made to look like conventional cigarettes or other products, such as pens. They are often marketed as a safer alternative to conventional

cigarettes[2], though there is a growing body of research[3, 4, 5] suggesting that there are health risks associated with the e-liquid. E-cigarettes have gained a large market in the United States since 2004 when they were first manufactured[6].

Prevalence of Use

E-cigarette ever use has increased for both adult and adolescent populations. The HealthStyles survey of US adults found that ever use among adults was 8.5% in 2013, up from 3.3% in 2010[7]. According to the 2013 National Youth Tobacco Survey, ever use of e-cigarettes among high school students was 11.9%, and 3.0% for middle school students[8]. These statistics show a steady increase over the past few years as the rates for high school students was just 4.7% in 2011[9]. High school aged adolescents have the highest rates of ever use, and is increasing more rapidly among this age group than any other.

The 2013 National Youth Tobacco Survey found that among high school ever users, use was more common among males than females, and non-Hispanic whites had the highest rates of any racial or ethnic group followed by Hispanic and then non-Hispanic blacks[7]. The 2013 National Adult Tobacco Survey also found higher rates among males, and with respect to race, other non-Hispanics and white non-Hispanics had the highest rates of any racial/ethnic groups[10]. With respect to education levels, rates were highest among those with a GED and significantly lower for those with an undergraduate or graduate degree. Rates were higher among people with lower income levels and among younger adults. Rates of e-cigarette use were also significantly higher among the LGBT community than the heterosexual community. These demographics suggest social position impacts likelihood to use e-cigarettes.

Reasons for Use of E-Cigarettes

The motivations for, and patterns in, initiating and continuing use are also important components of the epidemiology of e-cigarettes use. The devices are frequently viewed and marketed as a smoking cessation aid[2], despite the fact that the FDA has not certified them as a therapeutic device. Studies on effectiveness of e-cigarettes in conventional cigarette smoking cessation have been conducted with mixed results. Multiple longitudinal studies[2, 11, 12, 13], cross sectional studies[14, 15] and randomized clinical trials[16, 17, 18] have found that e-cigarettes are not effective smoking cessation devices, are no more effective than the nicotine patch, or have a negative impact on smoking cessation. However, one randomized clinical trial[19] and one longitudinal study[20] have found that use of e-cigarettes, as a smoking cessation tool, is associated with quitting smoking conventional cigarettes. The variation in results of these studies suggest that e-cigarette use may sometimes be effective for smoking cessation depending on the population.

Other questions about e-cigarette use include whether e-cigarette users are engaging in dual use of e-cigarettes and conventional cigarettes, as well as questions about how the use of e-cigarettes and cigarettes contribute to motivation to use the other. Findings so far suggest that the answers to these questions vary depending on age group. One study found that adults most often report e-cigarette use as a way to substitute conventional cigarette use, but results differ among young people, who are more likely to not have used conventional cigarettes[9]. Results from the National Youth Tobacco Survey in 2012 show that 76.3% of current e-cigarette users in grades 6-12 reported also smoking conventional cigarettes, suggesting that dual use of conventional and electronic cigarettes is common[8]. Another study on adolescents found that e-cigarette users were more likely to also smoke conventional cigarettes and less likely to quit smoking conventional cigarettes[21]. A study looking at rates of ever having used e-cigarettes among current and former

smokers and never smokers found that, among smokers, use was 11.4%, whereas among former and never smokers the prevalence was 2.0% and 0.8%, respectively[22]. These findings suggest that there are relationships between e-cigarette use and conventional cigarette use, and that people are frequently using these products simultaneously.

Regulations on E-Cigarettes

The Food and Drug Administration has proposed a rule to deem e-cigarettes as tobacco products, thus making it possible to regulate the products under the Tobacco Control Act[23]. The content of the proposed rule states that the FDA "do[es] not currently have sufficient data about these products to determine what effects e-cigarettes have on public health." The uncertainty about the health effects of the e-liquid and the combustion process demonstrates that they may not be safe. The health effects of these products are relatively unknown, but there has been an increase of research on the effects**.** The incomplete understanding of health effects of electronic cigarettes is one cause for regulation, especially because some studies have found possible negative effects and dangerous components of e-liquids. Multiple studies have analyzed the chemical components of e-cigarettes with varying results[5]. Studies have found that either there are toxic substances in the e-liquid or in the vapor produced when the heating occurs, such as carbonyl compounds[3], though these levels are much lower than conventional cigarette levels[24]. One study on the epithelial cells of users found that e-cigarettes have harmful effects on the airways of young people[25]. A review of online forum postings found that users had reported at least 326 negative side effects from e-cigarette use[26]. Nicotine is known to be harmful to a developing brain[27], which is problematic considering the high percentages of adolescent users and the appeal to these groups with flavored e-liquid. Another concern regarding e-cigarettes is the adverse health affects associated with ingestion of e-liquid. Between September 2010 and

February 2014, 2,405 reports were made to poison centers regarding contact with e-cigarettes or e-liquid[4]. More than half of these exposures were associated with adverse health effects including vomiting, nausea and eye irritation.

The FDA's April 2014 proposed deeming[23] rule has brought e- cigarettes into the policy spotlight. Currently there is no FDA regulation of these products, so state and local governments are responsible for any regulation. Even if the proposed rule passes, states will still be responsible for regulating youth access, where products can be used, and taxation. While many states and localities have been successful at passing legislation banning electronic cigarette sales to minors and including them in smoke-free regulations, these laws have not been without controversy. The e-cigarette industry is strongly opposed to regulation that would affect product sales, and has been using its power to influence policies. Tactics used by the tobacco industry to influence policy and public opinion are being used by the e-cigarette industry today. These include creating scientific controversy about studies questioning the safety of the products, using media to spread ideas about safety of the products, and specific marketing campaign targeting vulnerable groups such as children and teens[28]. In order to influence policy, tobacco companies took actions such as lobbying and creating political allies, as well as writing the policies themselves in attempt to pass weak laws, set low tax rates, or include preemption.

These tobacco industry tactics are now common among e-cigarette company action as well, as emerging research has found[29]. Perhaps the most controversial aspect of e-cigarette policy centers on the definition of the products that is used in the law's language. This controversy focuses on whether electronic cigarettes are considered as tobacco products or not, which will determine whether they can be regulated under pre existing laws for conventional cigarettes or if new laws must be created entirely. Inclusion of e-cigarettes in the definition of

tobacco product is the public health preferred definition because it expands an already existing definition with set regulations. This definition would allow e-cigarettes to be subject to the same regulations as tobacco products making the regulation process quicker and easier. An additional aspect of e-cigarette use that may benefit the tobacco industry and harm public health is the popularity among adolescents and trends of dual use that may lead to a renormalization of smoking behaviors. The Centers for Disease Control and Prevention recently published their recommendations for e-cigarette regulation in which they stated that youth tobacco prevention strategies should be applied to e-cigarettes as well in order to prevent use of the products and to continue with efforts to de-normalize tobacco use[30].

Despite the uncertainty about the effects of e-cigarettes, use has increased dramatically in the past few years, especially among adolescent populations. Policies to regulate e-cigarettes have been become more common, but questions about the industry's involvement in these policies have created controversy. In this paper, I attempt to increase the understanding of state level e-cigarette policies. To do this, I will estimate the reach of e-cigarette inclusion in youth access and smoke free policies, estimate the rate at which e-cigarettes are taxed compared to conventional cigarettes and describe the influence of the industry on e-cigarette state laws.

METHODS

Study Design

The data set was composed of state level electronic cigarette policies. These policies were read and coded for variables that suggest the nature and strengths of these policies as well as the electronic cigarette industry's involvement. In order to locate the policies, the Americans for Nonsmokers Rights list of states with policies was used as reference[31], and then state legislature websites were searched using common terms "electronic cigarettes," "e-cigarettes," "electronic

nicotine delivery devices," "alternative nicotine products," and "vapor products." LexisNexis for Law Schools database[32] was also used to locate policies that were difficult to find on the state legislature websites. For introduced policies, the original policy was coded and for adopted policies the final adopted version was coded.

Selection

Policies included in the data set were limited to state level policies that had been adopted. Policies that had been introduced but not passed or still in the legislative process were also included, though less significant for analysis. Federal and local level regulations were not included in the data set. No federal regulations pertaining to e-cigarettes have been passed, and while there are vast number of local policies regulating e-cigarette sales and use, these were excluded in order to be able to study the depth of state level policies. International policies were also excluded.

Coding

The data from the policies were assigned values and coded in an Excel file. Data was collected through a double coding process, with two individuals coding for each policy using the same codebook. The coding variables included prevalence of policies and characteristics of those policies. The categorizations of the policies strength and industry influence were determined based on standards developed during the codebook creation. The coded information was input into a Microsoft Excel workbook. The workbook included a spreadsheet for each type of policy that correlated to the codebook. The spreadsheet design was uniform for each coder to avoid error. Two coders independently coded for every policy and then met to address discrepancies until a consensus was formed.

Measures

The codebook was developed with different variables for each type of policy: youth access policies, smoke free/ clean indoor air policies and tax policies. The variables were selected in order to measure prevalence of policies, the strength of the policies, as well as to determine the industry influence on the laws. The coding measures are listed in Table 1.

The codebook for the measures of strength for the smoke free laws was based on a previous tobacco control policy study where strength was determined by completeness of the ban of use in certain areas[33]. The codebook for the measures of strength for the youth access laws was developed for this study, and was based on the inclusion of regulation against youth possessing and purchasing the products in addition to a prohibition on sales. The variables intended to measure industry influence included the name and definition of the product, the presence of preemption, and specified tax rates. To categorize the names and definitions, a three-tier system was created based off of American Lung Association categories. Policies using the term "tobacco product" are most favorable to public health, policies using the terms "alternative nicotine product" and/or "vapor product" are most favorable to industry, and all other terms are less clearly favoring public health or industry.

Statistical Analysis

Descriptive statistics of the data were analyzed using Microsoft Excel and Microsoft Office. The analysis was comprised of prevalence rates for each type of policy: youth access, clean indoor air and tax rates. Prevalence rates were also determined for the characteristics of the policies that indicated strength and industry influence.

RESULTS

Prevalence of Policies

Table 2 describes the prevalence of policies regulating e-cigarettes. In total, the data set included 72 policies comprised of 45 youth access policies, 10 clean indoor air policies, and 17 tax policies. Of the youth access policies, 41 were adopted policies, including 1 policy that was later vetoed, and 4 were introduced but not adopted. Of the smoke free/ clean indoor air laws, 3 were adopted and 4 were introduced. Of the tax policies, 2 were adopted and 15 were introduced but not adopted. There was also an additional 16 state wide regulations that banned e-cigarette use on specific sites but were not clean indoor air laws. These were also read and coded, though less emphasis was put on these policies during analysis.

The first statewide e-cigarette regulations began in 2010, and since then 40 states have adopted youth access policies, 3 states have adopted clean indoor air policies that include e-cigarette use in the definition of smoking and 2 states have set specific tax rates for e-cigarettes. Additionally, 16 states have clean indoor air laws that prohibit use of e-cigarette in certain areas or locations but have not included e-cigarettes in clean indoor air laws.

Strength of Policies

The clean indoor air policies that include e-cigarettes in New Jersey, North Dakota and Utah all scored high on the indicators of strength. Each policy had a complete ban on e-cigarette use in workplaces, bars, restaurants, schools and daycares. North Dakota also included a complete ban in gambling facilities. Utah's policy was the only one to include an exemption, which is only in effect for e-cigarette retailers until 2017. All of the policies prohibiting e-cigarette use in indoor areas including the site-specific regulations are listed in Table 3. Schools are the most commonly regulated area. Table 4 shows frequency of where e-cigarette use is prohibited across states.

There was variation in the results of the indicators for strength in the youth access policies (Table 5). Out of the 40 state policies, 35 specified that minors could not purchase e-cigarette products, and 21 specified that minors could not possess e-cigarette products.

The two tax policies that have been enacted vary greatly in strength. Minnesota included e-cigarettes in the preexisting tobacco excise tax therefore making e-cigarettes subject to the same 95% wholesale tax as cigarettes, which creates a significant price increase. North Carolina created a separate tax for e-cigarettes at $0.05 per fluid milliliter of e-liquid, which is similar to sales tax.

Categories of Definitions

Product definitions are important for e-cigarette policies, especially for youth access policies. There is considerable variation in definitions used across states (Table 6). "Tobacco Product" is the most public health protecting definition and "Alternative Nicotine Product" or "Vapor Product" is the most beneficial to the e-cigarette industry. Policies also define the products as electronic cigarettes/ e-cigarettes, electronic nicotine delivery system, tobacco substitute, nicotine products, nicotine devices, and electronic smoking devices or electronic delivery devices. The frequency of use each definition can be found in Table 7.

Alternative nicotine product or vapor product are the definitions that most serve the industry. These terms require nicotine, and create a clear separation from tobacco products therefore not subjecting them to the same regulations as tobacco products. Eighteen states have passed regulations using this language, 1 of which (Michigan) was vetoed for this reason. Four of these policies include specific exclusion of e-cigarettes from the definition of tobacco products. Georgia, Kentucky, South Carolina and Virginia specifically state the e-cigarettes are not tobacco products in their definition section of their policies. The definition of "nicotine

product" "nicotine delivery device" or "product containing nicotine" is another definition that appears to serve the industry's influence. This definition also requires that nicotine is present in the product and sometimes exclude tobacco products. Three additional policies use this language. Only five states; Colorado, South Dakota, Vermont, West Virginia and Wyoming, have passed regulations using public health preferred language.

The other definitions used in the remaining 15 states use more broad language. Nine states use "e-cigarette" or "electronic cigarette," and 5 states use "electronic smoking device" "electronic delivery device" or "electronic nicotine delivery system." One state defines the products as "tobacco substitutes." These definitions do not include or exclude electronic cigarettes from the definition of tobacco products, instead using a more general classification.

The three states that have included use of e-cigarettes in clean indoor air laws expanded their definition of smoking therefore expanding their clean indoor air laws to include the use of e-cigarettes. This classification does not require the specification of whether or not it is a tobacco product to be enforced.

Preemption

Five state policies include preemption that prohibits local governments from enacting laws that are stricter than the state law. Four of the policies were youth access policies and one was a clean indoor air policy. The definitions used in the four clean indoor air policies were alternative nicotine product or vapor product, vapor product, electronic cigarette, and nicotine product. This indicates that preemption is most likely to be included in policies that do not use public health preferred language.

DISCUSSION

Many policies have been introduced and passed regulating e-cigarettes. The results demonstrate that youth access policies are the most common form of regulation, though they are not as consistently strong as clean indoor air policies. Additionally, the language used in the policies has an impact on the ability of the policy to protect public health. Many of the policies use the least public health protecting language, while only a small number of policies use the most public health protecting language. Few clean indoor air and tax policies have been adopted to regulate e-cigarettes at the statewide level.

Importance of Policy

Regulation is important in order to protect the health of consumers, especially adolescents. From 2011 to 2013 adolescent e-cigarette use increase by three hundred percent[34], and this population must be protected from risks associated with nicotine intake and renormalization of smoking as well as the health effects from intake of e-liquid and other possible health effects of e-cigarettes. Regulations that discourage use of e-cigarettes and limit exposure to potential hazards are necessary. Youth access, clean indoor air and tax policies are effective tools to achieve this. However, each type of policy is not equally as effective in changing behavior as has been shown with tobacco control policies.

Youth access policies are the least effective of the policy methods to reduce teen smoking. Multiple studies have concluded that youth access restrictions have very little or no impact on adolescent smoking behaviors[35, 36]. This is because teens can easily rely on other methods to obtain tobacco products, such as friends and family members, fake identification and other methods. Additionally, merchant compliance with age restrictions is difficult to enforce. Clean indoor air policies originally intended to protect people from second hand smoke have

demonstrated impacts on directly reducing smoking rates[37]. This is true for the overall population and specifically for adolescents[38]. Smoke free and clean indoor air laws are more effective because they make smoking burdensome and socially unacceptable[37]. Tax policies are the most effective policy tool in reducing rates of smoking[39]. Research indicates that adolescents are significantly more price-responsive than adults[40], so tax policies have an even greater impact on reducing rates among youth. These findings held true in a simulation study analyzing how policies impact smoking behaviors. The study found that changes in smoking prevalence could be accounted for mostly by price changes in the products, and in small part by clean indoor air, marketing and youth access laws[41]. Tax increases are so effective because price increases effect the ability of consumers to purchase the products. Despite the fact that tax policies are most impactful on behavior change, there are very few for e-cigarettes. Instead the vast majority of e-cigarette policies are youth access policies, which are ineffective in preventing youth from using the products.

The Importance of Definitions

The definition used in each state's policy has implications for future regulations, and there is a great amount of variation in the definitions used. The states that pass laws with industry favoring definitions such as "alternative nicotine products or vapor products" are differentiating the products from conventional cigarettes and other tobacco products. This will make it more difficult to regulate the products use and taxation because they cannot be included under preexisting tobacco regulations, so entirely new regulations would need to be created[29]. States that define e-cigarettes as tobacco products are including the products in a term that already has regulations, making the process quicker and the policies more consistent.

Implications for Policy Impact

The type of policy and the definition used are both important aspects of the effectiveness of the regulations to protect public health. E-cigarette companies have been vocal about supporting regulations that limit access of the products to minors[42], and large e-cigarette manufactures have supported FDA regulation[43]. These companies have little reason to oppose passing youth access laws, as they know they are inevitable and ineffective. Therefore, the industry could encourage youth access laws be passed as "Trojan horse" bills using the language of the bills put themselves in a favorable position for future regulations while passing legislation that will have little impact on actual sales. They appear to promote public health but in reality they have little impact on public health and can be used to undermine future more impactful regulations. Support for FDA regulation, which would require more extensive monitoring of product content and other costly measures, would enable large manufactures who can afford to comply with these regulations to gain an advantage over smaller manufacturers. No manufactures have been supportive of regulations that limit where the products can be used or that set excise taxes. These policies have a much more significant impact on consumer behavior and are more protective of public health, but would not benefit or negatively impact the e-cigarette companies. Therefore, the industry is unlikely to support these regulations.

Conclusions

E-cigarette youth access restrictions are unlikely to have an impact on use of the products because many of these regulations have included language that will weaken the ability of states to enact more successful regulations. Policy makers need to consider the importance of the language used in e-cigarette policies. E-cigarettes should be defined as tobacco products in future policies in order to best protect public health.

TABLES AND FIGURES

Table 1. Coding Variables

Youth Access Policies
1. State of the Policy (Introduced, Adopted or None) 2. Date Passed 3. Age of restriction 4. Does the Policy Prohibited Youth From Purchasing (Yes or No) 5. Does the Policy Prevent Youth From Possessing (Yes or No) 6. Name Given to E-Cigarettes in Policy 7. Definition Used for Name of E-cigarettes 8. Does Preemption Exists in the Policy (Yes or No) 9. Is A Tax Rate Specified (Yes or No)
Clean Indoor Air Policies
1. State of the Policy (Introduced, Adopted or None) 2. Date Passed 3. Name Given to E-Cigarettes in Policy 4. Definition Used for Name of E-cigarettes 5. Strength of the policy (Is Use Completely, Partially or Not Banned in the Following Locations, Workplace, Restaurant, Bars, Gambling Facilities, Schools, Childcare Facilities) 6. Does Preemption Exists the Policy (Yes or No) 7. Are there Other State-wide E-Cigarette Regulations (Yes or No) 8. If so, What Are The Other Regulations 9. How Do The Other Regulations Name E-Cigarettes 10. Is The Other Regulation a Complete or Partial Ban
Tax Policies
1. State of E-Cigarette Tax Policy (Introduced, Adopted or None) 2. What is the Tax Rate for E-cigarette Taxing 3. Does Preemption Exist Is The Policy

Table 2. Frequency of State-Level Policy Inclusion of E-Cigarettes

States with Policy (n=51)	n(total)	n(%)
State-Level Clean Indoor Air Laws		
Introduced and Not Passed	7	13.7
Passed	3	5.9
State-Level Youth Access Laws		
Introduced and Not Passed	4	7.8
Passed	40	78.4
Passed and Vetoed	1	2.0
Specific Tax for E-Cigarettes		
Introduced and Not Passed	15	28.8
Passed	2	3.9

Table 3. Characteristics of State-Level Clean Indoor Air Laws Including E-Cigarettes Listed

State	Status	Prohibited Indoor Spaces
Alabama	Introduced	Workplace, Restaurant, Bar, Gambling Facility, School, Daycare
Alaska	Introduced	Workplace, Restaurant, Bar, Gambling Facility, School, Daycare
Arkansas	Adopted	School
California	Introduced	Workplace, Restaurant, Bar, Gambling Facility, School, Daycare
California	Adopted	State Owned Property
Colorado	Adopted	School
Delaware	Introduced	Workplace, Restaurant, Bar, Gambling Facility, School, Daycare
Florida	Adopted	State Workplaces
Georgia	Adopted	Public University System Property
Hawaii	Adopted	Department of Health Property
Kansas	Adopted	Correctional Facilities
Kentucky	Adopted	Executive Branch Offices
Maryland	Adopted	Mass Transit
Massachusetts	Introduced	Workplace, Restaurant, Bar, School, Daycare
New Hampshire	Adopted	Public Education Facilities
New Jersey	Adopted	Workplace, Restaurant, Bar, School, Daycare
New York	Introduced	Workplace, Restaurant, Bar, School, Daycare
North Dakota	Adopted	Workplace, Restaurant, Bar, Gambling Facility, School, Daycare
Oklahoma	Adopted	State Property, Schools
Oregon	Adopted	State Agency Buildings
South Dakota	Adopted	Correctional Facilities
Utah	Adopted	Workplace, Restaurant, Bar, School Daycare
Vermont	Adopted	School, Daycare
Virginia	Adopted	School, Railway
Washington, D.C.	Introduced	School, Daycare
Wisconsin	Adopted	State Fair Grounds Indoors and Main Stage

Table 4. Characteristics of Adopted State-Level Clean Indoor Air Laws Including E-Cigarettes (n=19)

Characteristics	n(#)	n(%)
Workplace	3	15.8
Restaurant	3	15.8
Bar	3	15.8
Gambling Facility	1	5.3
School Property	8	42.1
Daycare	4	21.0
State Property	2	10.5
Correctional Facilities	2	10.5
Mass Transit	1	5.3
Railway	1	5.3
Public University System	1	5.3
Public Education Facilities	1	5.3
State Agency Buildings	1	5.3
State Workplaces	1	5.3
Department of Health Property	1	5.3
Executive Branch Offices	1	5.3
Indoor at State Fairgrounds	1	5.3

Table 5. Characteristics of Adopted State-Level Youth Access Laws (n=40)

Characteristic	n(total)	n(%)
Purchase	35	87.5
Possession	21	52.5
Age		
18	36	90.0
19	4	10.0
Preemption	4	10.0

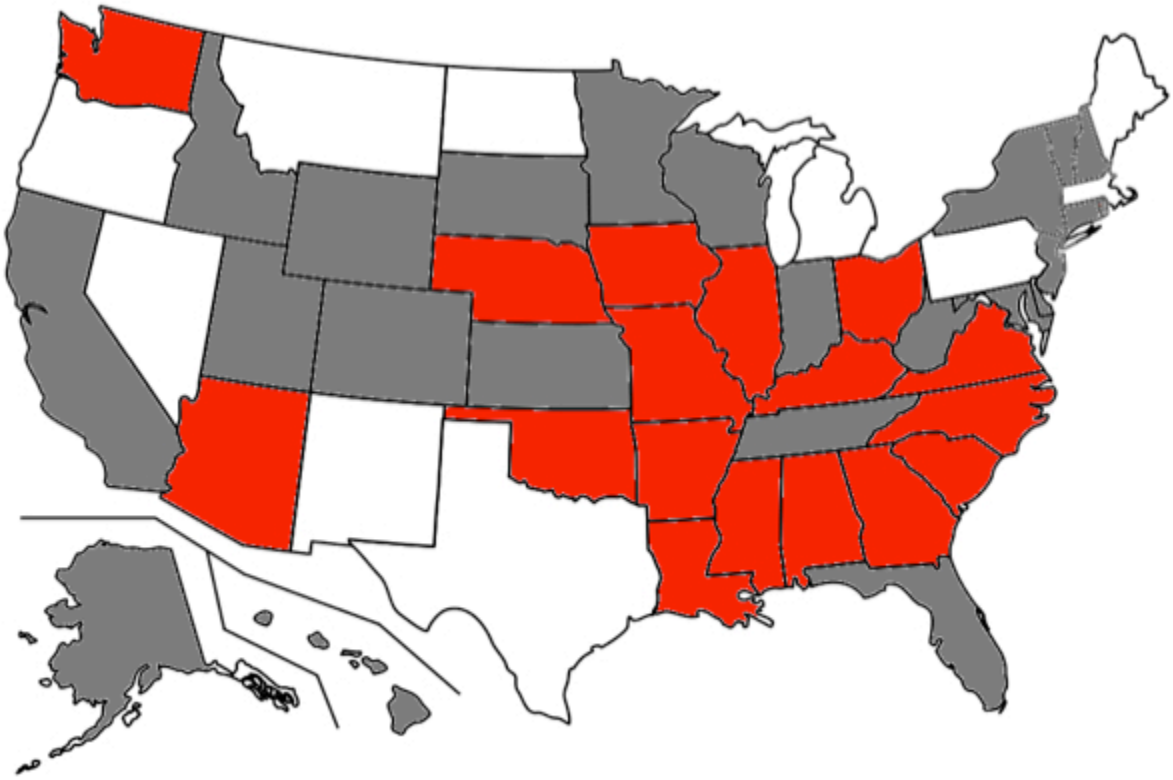
Table 6. Definition of Product in Adopted Youth Access Policies

State	Definition
Alabama	Alternative Nicotine Products
Alaska	Product Containing Nicotine
Arizona	Vapor Product
Arkansas	Alternative Nicotine Products
California	Electronic Cigarette
Colorado	Tobacco Product
Connecticut	Electronic Nicotine Delivery System
Delaware	Tobacco Substitute
Florida	Nicotine Products and Nicotine Dispensing Device
Georgia	Alternative Nicotine Product or Vapor Products
Hawaii	Electronic Smoking Device
Idaho	Electronic Cigarette
Illinois	Alternative Nicotine Products
Indiana	Electronic Cigarette
Iowa	Alternative Nicotine Products or Vapor Products
Kansas	Electronic Cigarettes
Kentucky	Alternative Nicotine Products or Vapor Products
Louisiana	Alternative Nicotine Products or Vapor Product
Maryland	Electronic Cigarette
Minnesota	Electronic Delivery Device
Mississippi	Alternative Nicotine Products and Electronic Cigarette
Missouri	Alternative Nicotine Products or Vapor Products
Nebraska	Alternative Nicotine Products or Vapor Products
New Hampshire	E-cigarette
New Jersey	Electronic Smoking Device
New York	Electronic Cigarette
North Carolina	Vapor Product
Ohio	Alternative Nicotine Products
Oklahoma	Vapor Product
Rhode Island	Electronic Nicotine Delivery System
South Carolina	Alternative Nicotine Products
South Dakota	Tobacco Product
Tennessee	Electronic Cigarette
Utah	Electronic Cigarette
Vermont	Tobacco Products
Virginia	Nicotine Vapor Product or Alternative Nicotine Product
Washington	Vapor Product
West Virginia	Tobacco Product or Tobacco-Derived Product
Wisconsin	Nicotine Product
Wyoming	Tobacco Product

Table 7. Frequency of Definitions in Adopted Youth Access Policies (n=40)

Categorization	n(total)	n(%)
Industry Preffered Definition	17	42.5
Public Health Preffered Definition	5	12.5
Other	18	45.0
Nicotine product/device	3	7.5
E-cigarette/electronic cigarette	9	22.5
Electronic smoking device	2	5.0
Electronic delivery device	1	2.5
Electronic Nicotine Delivery System	2	5.0
Tobacco Substitute	1	2.5

Figure 1. Map of Youth Access Policies Using Industry Definition



Red signifies that the state has passed a policy using industry-preferred language.

Grey signifies that the state has passed a policy that does not use an industry language.

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