E-Cigarettes: Emerging Issues for State Public Health

In 1964, the U.S. Surgeon General released a milestone report that formally addressed the severe health risks of smoking and tobacco use. In the fifty-years since the report’s release the United States has made considerable progress in reducing the tobacco-use epidemic. However, public health agencies are now facing new challenges due to the emergence of new smokeless tobacco products, such as electronic cigarettes (“e-cigarettes”). As the popularity of e-cigarettes grows, controversy has risen about categorizing and regulating this new product. This issue brief provides background information about e-cigarettes and the current status of their regulation. In addition, the brief identifies emerging issues relevant to state health agencies and provides short case studies outlining how certain states have addressed the issue of e-cigarette regulations.

Background

E-cigarettes are battery-operated devices that convert nicotine, chemicals, and flavoring into a vapor that is inhaled by the user. E-cigarettes are being marketed to consumers as an alternative to conventional cigarettes. Tobacco companies claim that e-cigarettes contain fewer toxins than conventional, combustible tobacco products and produce an odorless vapor rather than smoke.

Considerable controversy has risen over the contents of e-cigarette cartridges, e-cigarette-liquids, and labeling. Evidence suggests that e-cigarettes contain lower levels of toxicants than conventional cigarettes, however, a U.S. Food and Drug Administration (FDA) analysis identified several concentrations of impurities harmful to human health in e-cigarette cartridges. E-cigarettes are produced by a number of different manufacturers, therefore the level of nicotine and toxin exposure can vary widely between products; some e-cigarettes contain nicotine levels that approach fatal doses. The amount of nicotine and other substances inhaled by an e-cigarette user often fluctuates from puff to puff. E-cigarette liquids also pose a poisonous threat to young children. The number of calls to poison centers in relation to e-cigarette exposure has escalated from 2010 to 2014, with 51 percent of e-cigarette poison exposure occurring to children age five and under. Finally, the labeling on e-cigarettes may be misleading. The FDA found that certain e-cigarette brands claim to be nicotine-free, but actually contain small amounts of nicotine. Research also confirms that smoking e-cigarettes has many of the same immediate adverse effects to lung functions as traditional cigarettes. Although there are many apparent health issues with e-cigarettes, they are relatively new and understudied, therefore any long-term health effects associated with e-cigarettes remain unknown.

Current smokers are most likely to also be e-cigarette users. Tobacco consumer research indicates that e-cigarettes have the potential to be a smoking cessation or harm-reduction tool when they are substituted for conventional cigarettes. E-cigarettes, however, are not formally recognized by the FDA as a form of Nicotine Replacement Therapy.
Groups who have expressed concern over the development and growth of e-cigarettes also cite concerns that e-cigarettes may be a gateway product. People who did not use conventional tobacco products may develop an addiction to nicotine by using e-cigarettes; additionally, the use of e-cigarettes among these individuals has the potential to lead to the initiation of conventional tobacco products. Although there has been a downward trend in overall tobacco use among youth in the past ten years, the CDC recently reported that in 2011-2012, the percentage of students in grades 6-12 who had ever used e-cigarettes more than doubled. Among all middle and high school students in 2012, 6.8 percent have used e-cigarettes (2.7 percent in middle school and 10 percent in high school), 2.1 percent are current users of e-cigarettes, and 1.6 percent are dual users of both e-cigarettes and conventional cigarettes. The use of e-cigarettes by adolescents is concerning due to the negative effects nicotine has on brain development. Adolescent nicotine exposure may lead to a lack of impulse control, harm emotional learning capacity, and increase the likelihood of subsequent use of other addictive substances.

A recent study found that middle and high school students who used e-cigarettes had significantly higher odds of also smoking cigarettes, experimenting with cigarettes, and being an established smoker. The same study found that current cigarette users who had also used e-cigarettes had higher odds of planning to quit smoking; however, cigarette smokers who also used e-cigarettes had lower 30-day, six-month, and one-year abstinence rates compared to conventional cigarette users who had never used e-cigarettes. These data suggest that use of e-cigarettes may encourage continued cigarette use among U.S. adolescents, and even undermine quit attempts among current youth smokers.

Federal Regulation
E-cigarettes fall under the regulatory authority of the FDA. A 2010 court case, Sottera, Inc. v. Food & Drug Administration, held that since e-cigarettes are derived from tobacco, the FDA should consider e-cigarettes a tobacco product rather than a drug or medical device. In response, the FDA issued a letter stating “FDA will comply with the jurisdictional lines established by Sottera.” Tobacco products are regulated under the Federal Food, Drug, and Cosmetic Act, and lists certain tobacco products that are subject to reviews and controls by the FDA. E-cigarettes, however, are not presently mentioned in the act as a tobacco product. The FDA issued a proposed rule on April 25, 2014 that would broaden the definition of “tobacco product” to give FDA authority to regulate e-cigarettes, cigars, pipe tobacco, hookahs (water pipes), nicotine gels, and certain dissolvable products under the act. The proposed rule bans the sale of e-cigarettes to minors, prohibits the distribution of free samples, prohibits sales of e-cigarettes in vending machines, and requires manufacturers to disclose e-cigarette ingredients.
Issue Brief

Key Considerations for State Health Agencies

With the controversial nature of e-cigarettes and the uncertainties about their regulation, there are many emerging issues that are important for State Health Agencies and Officials to be aware of. During the current 2014 state legislative sessions, 36 states and the District of Columbia introduced at least 139 new bills regulating e-cigarettes. For updated information, visit the e-cigarette section of ASTHO’s state legislative tracker at: www.astho.org/state-legislative-tracking.

Clean Indoor Air

State health agencies should consider how e-cigarettes fit in with relation to existing state clean indoor air legislation. Tobacco companies have advertised e-cigarettes as an alternative to conventional cigarettes that can be smoked indoors undetected since e-cigarettes produce an odorless vapor instead of smoke. This type of marketing undermines clean indoor air laws, many of these laws don’t explicitly list e-cigarettes as prohibited.

Availability of E-Cigarettes to Youth

The availability of e-cigarettes to youth is another area that deserves attention from state health agencies. Many states are beginning to pass legislation banning the sale of e-cigarettes to minors, but several states currently have no age restrictions on e-cigarette sales. States without specific e-cigarette legislation may not be able to impose penalties on retailers that sell e-cigarettes to youths. Even in states with legislation, online sales of e-cigarettes are not banned, so the internet provides another channel through which youths can purchase these products.

Youth-Targeted Marketing

The marketing of e-cigarettes to youth is an additional concern. The 2009 Family Smoking Prevention and Tobacco Control Act banned cigarettes that contain flavors other than tobacco or menthol. E-cigarettes are not subject to this law and many companies are creating and marketing e-cigarettes that have fruit-flavor additives or contain other flavors that appeal to youth. A congressional report released in April 2014 highlighted the tactics e-cigarette manufacturers currently use to appeal to youth. The report found that e-cigarette companies sponsor youth-oriented events, provide free samples at youth-oriented events, use celebrities to glamorize e-cigarettes, advertise via non-age-restricted social media sites, air television commercials during programs with youth viewership, and market e-cigarettes in youth-appealing flavors including “Cherry Crush, Chocolate Treat, Peachy Keen, and Grape Mint.” E-cigarette manufacturers have doubled their marketing expenditures from 2012-2013, with six of the surveyed companies spending a total of $59.3 million on e-cigarette marketing in 2013. A recent study found that between 2011 and 2013, youth exposure to television e-cigarette advertisements increased 256 percent, and young adult exposure increased 321 percent.

The upward trend of e-cigarette use among middle and high school students, combined with the accessibility of e-cigarettes to minors and unregulated youth marketing, points to e-cigarettes as a possible gateway to nicotine addiction for youths.
Case Study: Hawaii Restricts E-Cigarette Sales to Youth

In 2013, Governor Neil Abercrombie’s administrative package included proposed legislation to form a legal definition of electronic smoking devices and prohibit sales to persons under 18 years of age. The Hawaii State Department of Health (HI DOH) researched other states’ legislation and consulted with the Tobacco Control Legal Consortium to determine the appropriate language to use in the e-cigarette bill. The proposed bill used the term “electronic smoking devices,” since this terminology is inclusive of the many forms in which e-cigarettes are manufactured.

The HI DOH received support from the state attorney general’s office, the Hawaii Department of Education (HI DOE), tobacco control coalitions, and community partners, all who worked collaboratively to pass the bill. The Coalition for a Tobacco-Free Hawaii (CTFH) and HI DOH conducted a statewide opinion poll which helped advance the legislation as it showed strong public opinion in favor of e-cigarette sale restrictions to minors. HI DOH and HI DOE informed legislators on the increasing use of e-cigarettes among youth. CTFH generated action alerts and organized community partners, including REAL: Hawaii Youth Movement Against Tobacco Use, to provide testimony to the state legislature.

During Hawaii’s 2013 legislative session, the original administrative bill was deferred. However, the language banning e-cigarette sales to minors was subsequently added to another bill, HB 672, which also focused on restricting access to tobacco products. The bill passed, and amended Hawaii Revised Statute §709-908 effective July 2013. The legislation not only restricted the sale of e-cigarettes to persons under 18 years of age, but also eliminated all self-service displays of tobacco products and required new signs at the point of sale for e-cigarettes.

Since the enactment of the 2013 law, HI DOH created its own internal policy in December 2013 prohibiting the use of e-cigarettes on all premises where employees work, and in HI DOH vehicles throughout the state. The Island of Hawaii passed a bill in December 2013 that increased the minimum age for sale of tobacco products, including e-cigarettes, from 18 to 21 in the County of Hawaii. HI DOH also plans to revise its Hawaii Youth Tobacco Surveys to include more detailed questions about e-cigarettes. These revised questionnaires will measure the legislation’s impact among the diverse youth population of Hawaii.

Lessons Learned:

- Use a broad definition when deciding on language for legislation; electronic smoking devices are evolving products and continue to be marketed by many forms.
- Manufacturers often deemphasize the potential risks of e-cigarettes to legislators, claiming they are not marketing to youth despite youth-appealing flavors like bubble gum. Now that many brands have been bought by tobacco companies, they have large marketing and advertising budgets along with national distribution networks to sway public opinion. The companies have used grassroots tactics such as started providing scripts to local merchants to use for testimony to the legislature in opposition of e-cigarette regulations.
Issue Brief

- There is still a lot to learn about e-cigarettes, including how to inform the public about their components. Since e-cigarettes are emerging products, few states have examples of e-cigarette PSAs or health communications campaigns. The limited amount of scientific data, combined with the lack of existing messaging, makes it difficult for states for develop media campaigns.
- Show decision makers examples of e-cigarette marketing to demonstrate their youth appeal.
- Legislation on e-cigarettes may move incrementally. Hawaii’s successful passage of a ban on sales to youth came after another proposed bill to tax e-cigarettes had been unsuccessful. As of 2014, a number of new bills have been proposed addressing several facets of regulating and taxing e-cigarettes, including new state clean indoor air legislation. Although the process may be long, incremental progress is still important to build support and move toward more comprehensive regulations.

Read the full case study at: www.astho.org/Prevention/Tobacco/Case-Study/Hawaii/

Taxation of E-Cigarettes

Currently, all states charge an excise tax to consumers purchasing cigarettes, and every state except Pennsylvania imposes taxes on other tobacco products. Without regulation at the federal level, states are not required to tax e-cigarettes the same as conventional cigarettes. Without these taxes, e-cigarettes are lower priced, which may be an incentive for minors to purchase. In 2013, Utah legislators tried unsuccessfully to pass an amendment to state law which would tax e-cigarettes and restrict distribution of product giveaways or other promotions. Oregon is currently considering whether or not to introduce legislation about taxing e-cigarettes as a tobacco product.

Case Study: Minnesota Increases E-Cigarette Taxes

Launched in 2011, Minnesota’s Raise It for Health Coalition brought together partners from across the state to launch a media campaign to build public support around an increase in state cigarette tax. The coalition identified State Health Commissioner Edward Ehlinger, MD, as a potential champion. Dr. Ehlinger wrote op-eds and held radio interviews that were aired across the state. Through Dr. Ehlinger’s testimony, the coalition was able to push the state policy change forward to the state legislature. MDH secured Governor Mark Dayton to speak on behalf of the tax initiative, and the coalition identified Representative Ann Lenczewski, Chair of Minnesota House of Representatives Taxes Committee, to lead the tax increase efforts with state legislature. The coalition also worked with national-level partners to support the issue, including the Public Health Law Center, the Tobacco Control Legal Consortium, and the Campaign for Tobacco-Free Kids.

In response to the coalition’s efforts, Governor Dayton included a tobacco tax increase in his budget proposal for the year. The state legislature passed the increase tobacco tax bill in May 2013 and Governor Dayton signed the $1.60 cigarette tax increase into law. Effective July 1, 2013, the total state excise tax per pack of cigarettes increased in Minnesota to $2.83. Early figures from the Minnesota Department of Revenue show cigarette sales decreased more than 35 percent in July 2013, the first month the increased taxes were in place, compared to July 2012. The coalition developed a set of key messages that provided information about the projected return-on-investment from the implementation of $1.60 per-pack cigarette tax increase.
For e-cigarettes and other tobacco products, the tax increased from 70 percent to 95 percent of the wholesale cost of the product. In 2010, Minnesota passed a Tobacco Modernization and Compliance Act which updated the state’s definition of tobacco products to include e-cigarettes. The 2010 act also restricts e-cigarette sales to minors. For purposes of consistency, e-cigarettes were included in the 2013 tax increase as a tobacco product without resistance.

Lessons Learned:
- There were competing interests within the coalition, therefore extensive conversations were necessary to decide which tax package and dollar amount to recommend for the proposed tax increase.
- Framing the tobacco tax increase as a public health imperative rather than a revenue issue was helpful in getting support from leaders and the public. The talking points prepared by the coalition reiterated that raising prices was the most effective thing state public health officials could do to reduce smoking rates.
- ClearWay and BlueCross BlueShield of Minnesota supported the coalition and brought in strong contract lobbyists and public relations expertise. This was key, because these partners possessed a high level of political savvy and knowledge of the state political environment, which was a benefit in helping get the legislation passed.
- The increase of $1.60 more than doubled the Minnesota cigarette tax, from $1.23 to $2.83 per pack. Such an increase was only possible because of strong support from champions in state leadership. It was important for MDH to get the tobacco tax increase on Gov. Dayton’s agenda so they could play a role as a state agency in the initiative.
- A supportive administration in the state health agency was instrumental in moving the initiative forward. Having Dr. Ehlinger’s support as the highest health authority in the state was influential in ultimately getting the governor’s support. In addition, support from Gov. Dayton and Rep. Lenczewski was important.
- Clear legislative definitions are key. The Minnesota Department of Revenue applied the 2010 definitions of other tobacco products, which included e-cigarettes, to the new 2013 tax law. The clarity of the previous legislation made it possible to include e-cigarettes easily in the updated tax law.

Read the full case study at: www.astho.org/Prevention/Tobacco/Case-Study/Minnesota/

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23 Sottera, Inc. v. Food & Drug Administration, 627 F3d 891 (D.C. Cir 2010).


34 Cigarettes and Tobacco Taxes, Minnesota Statute 297F.25 (2013). Available at: http://www.revisor.mn.gov/statutes/?id=297F.01