Should e-cigarettes be regulated like cigarettes?

restricting e-cigs access to youth

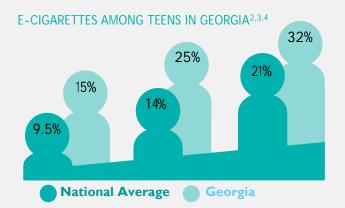
Arif Budiman, Gregory Little, Jameel Spencer

E-cigarettes were introduced into the North America cigarette market around 2007¹. Since then, there has been a rise in the usage of Ecigarettes in adults and even more alarming in

youth over the past couple of years. The nicotine in E-cigarettes is proven to have drastic impacts on the early development of brains and lungs in adolescent and could also introduce youths to more harmful drugs and activities earlier than expected.

The understanding of today's political environment and how it impacts the creation of legislation against the use of E-cigarettes shaped our policy recommendations we give later in the policy brief.

"One in four of Georgia high school students reported that they had used e-cigarettes"³



These policy recommendations also strengthen the idea that electronic nicotine delivery systems (ENDS) should be more heavily regulated like traditional cigarettes are in today's tobacco market.

As the knowledge and risk surrounding E-cigarettes continues to build, we are now becoming more aware of the problems associated, the public health impacts, and the dangerous implications on youth using these devices.

How do E-Cigarettes affect Youth and Public Health?

There are rising numbers in the incidents of

nicotine poisoning in youths which can be connected to the steady rise of e-cigarettes in the market. The liquid nicotine used to refill ecigarettes cartridges, even in low dosages, can be poisonous to a young child if ingested and can also be toxic if spilled on the skin. As the usage of e-cigarettes grows amongst adolescents, the likelihood of nicotine poisoning grows as well.

As the spread of e-cigarettes proliferates to younger individuals, the spread of diseases caused by the inhalation of nicotine and dangerous chemicals will become a more prevalent public health issue. Worsening of preexisting health problems such as asthma, sickle cell and cystic fibrosis are connected with the use of nicotine. Also, the use of nicotine has been linked to the impairment of adolescents' brains in regards to emotional development and also can desensitizes the brain to the effects of future possible druguse.

Adolescents brains are more sensitive to the addictive qualities of nicotine which could lead to long term impacts in regards to problems with impulsivity and the decrease of attention performance.

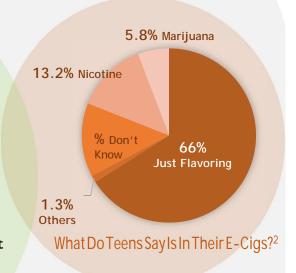
The additives and fruity flavorings found in e-cigs cause them to be more attractive to adolescents. This increases the

likelihood of young children developing addictions to

NICOTINE, smoking tobacco products earlier than expected, and suffering from the developmental problems associated with nicotine use. E-Cigs and the cartridges that are used for smoking are now being sold in dispensers similar to the traditional ones used for candy and soft drinks, which adds to the child like appeal and diminishes its harmful view in their eyes.

How do E-Cigarettes affect Youth and Public Health?

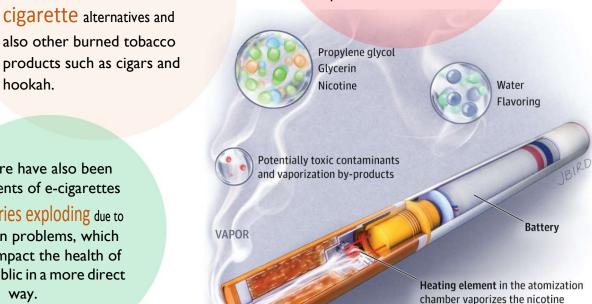
Many of the **chemicals** found in the refillable cartridges and construction materials used for Ecigarettes are not FDA approved for inhalation. These dangerous chemicals can be inhaled due to the heating of metals and liquids found in the cartridges used by e-cigarettes. There is also very low levels of regulation in place to stop the proliferation of non-regulated cartridges into the E-Cigarette market. This is dangerous because we do not know exactly what is inside the cartridges, what levels of nicotine are present and what other additives are inside the cartridges that many adolescents smoke.



As the spread of E-Cigarettes grows, it increases the number of individuals that are

exposed to second-hand

Smoke containing harmful additives and chemical compounds.



Nicotine cartridge holds the nicotine solution. The nicotine content may be high, medium, low, or none.

solution.

Mouthpiece

Fig. I Parts of e-cigarettes¹³

There have also been incidents of e-cigarettes batteries exploding due to design problems, which can impact the health of the public in a more direct way.

hookah.

Individuals that smoke e-cigs

smoking more conventional

Cigarette alternatives and

are at greater risk of

CurrentE-Cigarettes Policy

The Food and Drug Administration (FDA) has tightened regulations for retailers who sell vaping products to minors. In August 2016, the FDA finalized the responsibility for regulating any electronic nicotine delivery systems (ENDS) that meet the definition of a tobacco product⁴. The FDA monitors the manufacture, packaging, importing, promotion, sale, and distribution of ENDS products. In 2018, the FDA has required that all ecigarette manufacturers and advertisements provide a health warning label on ENDS products equivalent to warning labels on cigarettes to describe the addictive characteristic of nicotine usage⁵.

Since the implementation of recent policies the FDA now controls:

Requiring all e-cigarette manufacturers to provide warning labels: All packaging of ENDS products to be distributed and sold must contain the label warning purchasers of contained nicotine and its potential addiction



Fig. 2 Warning label in e-cigs products¹⁷

FDA Policies on e-cigarettes sales:

- Requiring all e-cigarette manufacturers to provide warning labels
- Banning the sale of e-cigarettes to all minors
- Requiring the disclosure of all ingredients found in ecigarettes
- Regulation of e-cigarette usage in locations accessible to minors
- Regulation of ENDS product vending machines

Banning the sale of e-cigarettes to all minors: Prohibits the sale of any ENDS products to children under the legal purchasing age (18) in Georgia, and bans the dispensing of free samples to minors

Requiring the disclosure of all ingredients found in ecigarettes: E-cigarette manufacturers must report all ingredients present in products

Regulation of e-cigarette usage in locations accessible to minors: Prohibits the usage of ecigarettes in or near schools, playgrounds, and daycares containing minors; e-cigarettes may not be sold within 500 feet of locations

Regulation of ENDS product vending machines: Any store containing vending machines or individual vending machines selling e-cigarettes must provide a sign prohibiting selling to customers under 18; prohibits self service or testing displays in places accessible to minors

Even with FDA regulations there still remains a high rate of e-cigarette usage among minors. Focusing on strengthening policy regulations by Georgia state legislators would provide the best option to decrease the rate of e-cigarette usage among minors in the state of Georgia. All products including: e-cigarettes, vaping vaporizers, hookahs, and other electronic nicotine delivery systems (ENDS) should be regulated the same as tobacco containing products (e.g. Cigarettes) in the state of Georgia. Legislators for the state of Georgia should contemplate implementing stronger policy changes and hardening the consequences on retailers in violation of FDA regulations in Georgia.

Teens have been drastically increasing vaping methods, with 37.3 percent of 12th graders reporting "any vaping" in the past 12 months, compared to just 27.8 percent in 2017⁶. Out of 50 states, Georgia is ranked the 8th most popular state in e-cigarette sales. In 2017, the Department of Public Health estimated 2 out of 5 Georgia high school students were able to purchase nicotine products despite being under the legal age 18⁷. Included in the products were e-cigarettes and other ENDS devices.

Policies recommendation :

- Increase the legal purchasing age for ecigarettes to 21
- Increase taxes on all ENDS products
- Increase the amount on fines for retailers found violating age restriction regulations

Out of 50 states, Georgia is ranked the 8th most popular state in e-cigarette sales"

Missouri is one of the states that focus on restricting the spread of e-cigarettes and tobacco in general. Some of the counties in Missouri such as Columbia, Kansas City, and Gladstone has ben raised the age for purchasing e-cigs to 21¹. The most common types of regulation in 68 countries included sale bans, use restrictions (indoor use / smoke-free public places), age-of-purchase requirements and advertising and promotion bans. Few countries applied tax to E-cigs¹⁷

The time to e-xecute is now!

We are recommending that policy changes be implemented in the state of Georgia three (3) ways: increase the legal purchasing age for ecigarettes to 21, increase taxes on all ENDS products, and increase the amount on fines for retailers found violating age restriction regulations. By Georgia increasing taxes on ENDS products it would become more difficult for thousands of youth to afford the products on a regular basis and lead to less e-cigarette usage. The state of Georgia should increase the amount fined to retailers so that retailers are more likely to strongly enforce age restrictions.

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