Recent Increase in E-Cigarette Use Among Adolescents in North Carolina

Rachel Jensen, April 2019

The Problem

- Electronic cigarettes are defined as products that use an aerosolized liquid, which can often contain nicotine, in order to simulate the experience of cigarette smoking (Mackey, Miner, & Cuomo, 2015).
- The percent of high school students that use e-cigarettes in North Carolina increased from 1.7% in 2011 to 16.9% in 2017 and it is only projected to increase even more (Tobacco Use Rising, 2018).

Reasons Behind the Increase

The first e-cigarette came on the market in the US in 2007 (Lichtenberg, 2017). The FDA never recognized the device as an "antismoking aid" and also did not fully implement any regulations on the product until 2016. Therefore, sales of e-cigarettes were highly unregulated, and a large portion of the sales of the device, about 30%-50% specifically, actually took place on the Internet (Lichtenberg, 2017). Additionally, this issue was further complicated as e-cigarette companies began targeting



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adolescents in their marketing strategies, which often included advertisements that did not contain information about the contents of the device (Hurst, 2018). The companies also began producing e-liquids in a wide variety of flavors in order to appeal to a younger demographic (Lichtenberg, 2017). Lastly, based on a study conducted in North Carolina, teens are more likely to engage with the product as they get older and especially if they see their friends also using e-cigarettes (Giovacchini, Pacek, McClernon, & Que, 2017).

Why should you care?

E-cigarette companies have begun targeting adolescents in their marketing strategies (Hurst, 2018). As a result, an increasing percentage of teens do not associate the product with any risk and are using the device. However, many e-cigarettes do actually contain nicotine, which is a highly addictive substance (Saitta, Ferro, & Polosa, 2014). Therefore, if this behavior continues without any policy intervention, it could very easily lead to a public health crisis among this demographic.

Additionally although North Carolina has prohibited e-cigarette use on school property, the state has not passed a law against using the device in all indoor areas as shown in Figure 2 (US E-Cigarette Regulations, 2019). As a result, adolescents can still use the device in other places, which exposes other North Carolina citizens to potentially harmful e-cigarette vapor (Saitta et al., 2014).



Figure 2, Source: (Marynak, 2017)

The Solution

This increase in the use of ecigarettes among adolescents in North Carolina needs to be addressed immediately. As the current policy about school property has not achieved the desired effect, NC legislators must pass and implement an entirely new policy. Specifically, they should craft a bill that requires the use of a warning label that the FDA proposed, which is not currently required at the federal level. In a recent study, researchers compared the effects of two different warning labels on use of the device among adolescents. The first label was the one currently used by e-cigarette companies, and the other label was provided by the FDA. The researchers concluded that the current labels are less effective than the new FDA labels as the FDA labels deterred a higher number of college students from engaging with e-cigarettes (Lee, Lin, Seo, & Lohrmann, 2018). Therefore, although this study did not test for longevity, this policy would clearly address the policy issue facing the state, especially when other policies have not decreased the percentage at all. NC legislators should require this new FDA label as soon as possible in order to hopefully avoid a public health crisis.

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