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# Development of a Customized Vaping Cessation Initiative to Assist Massachusetts Youth Who Wish to Quit Vaping



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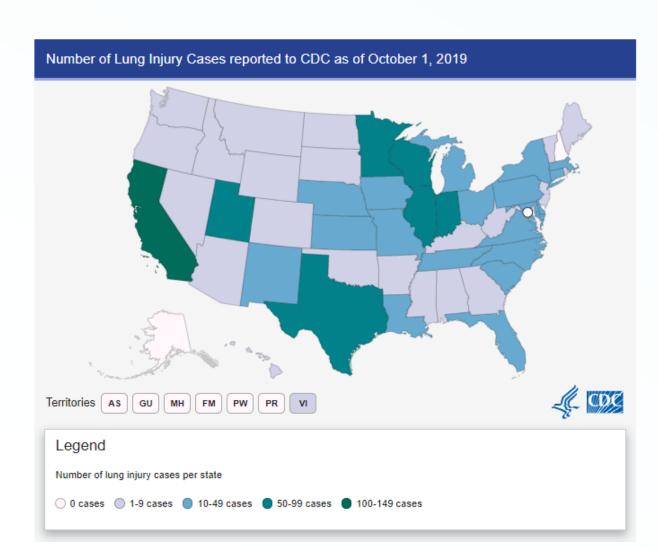
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The United States Surgeon General has identified the use of e-cigarettes/vapes as an epidemic among our youth, addicting a new generation to nicotine.

## Background

- Given the vaping epidemic among youth in Massachusetts, the Center for Tobacco Treatment Research and Training at the University of Massachusetts Medical School responded to school nurses' requests for assistance in helping students quit by collaborating with the Massachusetts Department of Public Health and interested schools in the development of a customized vaping cessation initiative.
- The vaping epidemic in the United States has risen at an alarming rate with over 3.6 million youth using e-cigarettes in 2018, which is a 78% increase from 2017 2018 as reported in the 2018 National Youth Tobacco Survey.<sup>1</sup>
- The Centers for Disease Control (CDC) reports, as of the beginning of October 2019, there have been over 1,000 cases of lung injury and 18 confirmed deaths associated with ecigarettes, commonly known as vaping.<sup>2</sup>
- Of these cases, the CDC reports 58% are from using nicotinecontaining vape products with 17% of reported cases exclusive to use of nicotine-containing products.<sup>3</sup>
- 81% of the cases are under the age of 35 with 21% of patients between 18-20 and 16% of the cases are youth under 18 years old.<sup>4</sup>
- While the specific chemical exposure associated with the growing number of cases of lung injury and deaths associated with e-cigarette/vape use is unknown, this adds to the urgency in addressing this epidemic by providing cessation tools for youth.
- Nicotine can be harmful to developing brains. Nicotine use can negatively impact memory, attention and learning in youth.
- At this point in time, there are no evidence-based approaches to support youth who vape in quitting.



# Massachusetts Prevalence

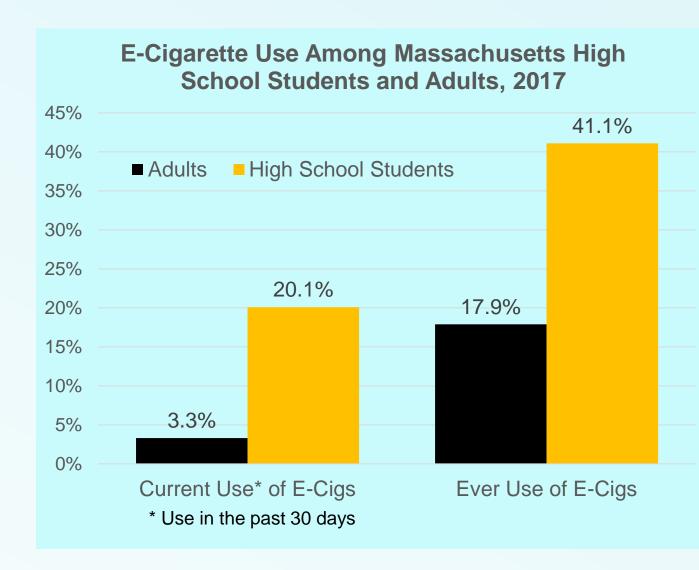


Figure adapted from: getoutraged.com; Vaping Fact Sheet<sup>5</sup>

- In Massachusetts, 41.1% of high school students have tried electronic vapor products, and 20.1% currently use vape products.<sup>6</sup>
- Nearly 10% of middle school students have tried electronic vapor products (2017 Youth Health Survey).<sup>6</sup>
- As of October 8, 2019 Boston.com reported the Massachusetts Department of Public Health has reported 121 suspected cases of vaping-related lung injuries to the CDC and one vaping-related death in Massachusetts.<sup>7</sup>

#### References:

<sup>1</sup>Center for Tobacco Products. (2018). 2018 National Youth Tobacco Survey Finds Cause for Concern. Retrieved from <a href="https://www.fda.gov/media/120063/download">https://www.fda.gov/media/120063/download</a>
<sup>2</sup>National Montality Worlds Barrage Forly Balance / Vol. 68 Southershop 27, 2010, 115

<sup>2</sup>Morbidity and Mortality Weekly Report Early Release / Vol. 68 September 27, 2019, U.S. Department of Health and Human Services Centers for Disease Control and Prevention <sup>3</sup>Perrine CG, P. C., Boehmer TK, et al. (2019). Characteristics of a Multistate Outbreak of Lung Injury Associated with E-cigarette Use, or Vaping — United States, 2019. *MMWR: Morbidity and Mortality Weekly Report*. Retrieved from <a href="http://dx.doi.org/10.15585/mmwr.mm6839e1">http://dx.doi.org/10.15585/mmwr.mm6839e1</a> <sup>4</sup>CDC Webpage. Retrieved October 4, 2019, Outbreak of Lung Injury Associated with E-Cigarette Use, or Vaping <a href="https://www.cdc.gov/tobacco/basic\_information/e-cigarettes/severe-lung-disease.html">https://www.cdc.gov/tobacco/basic\_information/e-cigarettes/severe-lung-disease.html</a>

<sup>5</sup>getoutraged.com, Vaping Fact Sheet, retrieved 10/2/19

6Health & Risk Behaviors of Massachusetts Youth, Executive Summary. (2017). Massachusetts

Department of Elementary and Secondary Education and Department of Public Health.

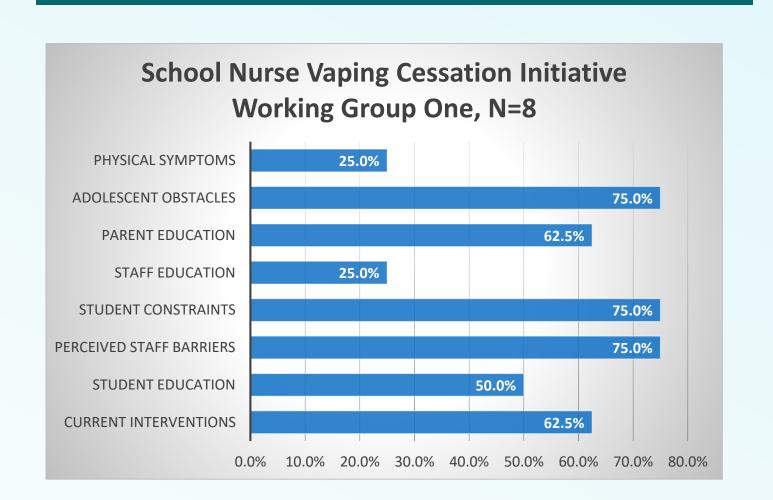
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<sup>7</sup>Boston.com, retrieved October 3, 2019. Massachusetts DPH reports more vaping-related lung injury cases to CDC.

### Methods

- A school nurse working group consisting of twenty school nurses from across Massachusetts was convened to (1) gather information about relevant issues in their schools and resources needed, and (2) guide the development of practical resources for students and school personnel.
- Working group members provided input at three separate working group meetings on four questions posed to them: (1) What are some of the ways you reach out to teens who are vaping? (2) What proportion of your students who vape are interested in quitting vaping? (3) How do you currently deliver services to students who vape? (4) What are your ideas to motivate and help your students to quit vaping?
- Of the three working group meetings, eight nurses in the first working group consulted on the content during the development of customized vaping cessation materials.
- Information gained from the working group and a continuous refinement process was used to develop and finalize vaping cessation resources for schools, school nurses and youth.

## Results



- 62.5% of school nurses reported a lack of parental knowledge about vaping.
- 75% reported a perceived barrier that youth do not believe vaping is harmful to their health.
- 25% reported the personnel in their school do not have a full understanding of the harms of vaping or the products students use to vape in school.
- 25% reported students experience severe symptoms from ecigarette/vape use.

## **Customized Resources**

Customized vaping cessation resources developed for youth in Massachusetts from our work with the school nurses working group include:

- Student materials on vaping addiction, the cessation process and available resources for youth.
- A Providers Guide to help school nurses and other school personnel use brief interventions to assist students with vaping cessation.
- Calling it Quits: Vaping, an adaptation of a previous comprehensive clinical protocol and booklet for school nurses and other providers to assist youth dependent on nicotine.
- Collaboration with the Massachusetts Department of Public Health and the Truth Initiative on a customized texting program, This Is Quitting, for Massachusetts youth:

This is Quitting powered by truth® is a free and confidential texting program for young people who vape. Text "VapeFreeMass" to 88709 to get started!

## Conclusion

- As evidence accumulates on the dangers of vaping, evidence based vaping cessation tools need to be developed and tested to assist youth who vape to quit.
- More research is needed to evaluate how the use of ecigarettes/vapes impact young people's ability to learn in the school setting.
- Action is needed to prevent younger generations from becoming addicted to nicotine and the dangers related to nicotine addiction.

In addition to **This is Quitting** powered by **truth**®, other resources for youth who vape in Massachusetts include:

- My Life, My Quit ™ has youth coach specialists trained to help young people by phone or text. Call or text "Start My Quit" to 855-891-9989 for free and confidential help.
- Visit teen.smokefree.gov for tools and tips.
- For more information, young people can visit mass.gov/vaping.
- More information for parents/adults is available at GetOutraged.org.

## Acknowledgements

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