

There's an Epidemic Spreading

How schools can help students understand the risks of vaping

By: Greg Taranto

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A current United States Food and Drug Administration **public service announcement** starts with "There's an epidemic spreading..." The ad goes on to provide a visual representation of how smoking e-cigarettes impacts the brain and lungs. The ad is quite powerful.

While one may argue that the use of the word "epidemic" is an exaggeration, it really is not. The use of e-cigarettes or vaping is quite widespread, and if you work in a middle school or high school, you have seen the increased use of vaping among today's teens.

The Numbers

There has been a 900% increase in high school students who vape between 2011 and 2015 (Surgeon General's Report, 2016). The same report indicates an alarming 27.1% of students (high school - 37.7% and middle school - 13.5%) had tried or currently use e-cigarettes.

For a better perspective, 2.4 million middle and high school students were current users (within the past 30 days) of e-cigarettes in 2014 (Centers for Disease Control and Prevention, 2017), and 10.7 million teenagers ages 12 to 17 have used or are open to trying e-cigarettes (U.S. Food and Drug Administration, 2018).

At Canonsburg Middle School (CMS), our health class numbers support the same U.S. trend with 81% of the student body reporting currently vaping, vaping in the past, or knowing someone who vapes.

Health Factors

While e-cigarettes are marketed as a safe alternative to smoking, new studies reveal the harmful effects of vaping various liquids (U.S. Food and Drug Administration, 2018; Centers for Disease Control and Prevention, 2017) by ingesting:

- Nicotine
- Volatile organic chemicals
- Cancer-causing chemicals
- Heavy metals (i.e., tin, nickel, and lead)
- Ultrafine particles
- Flavorings such as diacetyl (associated with lung disease)

The adolescent brain is particularly vulnerable to nicotine creating permanent changes in the brain's development and making it more prone to other addictive substances (Goriounova & Mansvelter, 2012). While manufacturers claim to have vaping liquids without nicotine, most do contain it, and even the nicotine-free versions have been found to contain the drug (U.S. Food and Drug Administration, 2018).

Users have also developed life-threatening, short-term health consequences such as pneumonia and wet lung. The bottom line is that adolescents need to know that even without nicotine, these liquids are placing harmful substances in the body.

Why the Increase?

E-cigarettes are being marketed as a safe alternative to smoking. The lack of regulation has resulted in a "free-for-all" approach from e-cigarette companies to use marketing strategies not permitted by traditional tobacco cigarettes. Kid-friendly flavors (bubble gum, candy, fruit), unique packaging, easy to conceal devices, ads containing models, and e-cigarette sponsored YouTubers doing vaping tricks, are catching the attention of adolescents to the extent that 7 in 10 adolescents see these ads regularly (Centers for Disease Control and Prevention, 2017).

It is astounding that we are about to repeat history when it comes to youth being addicted to nicotine. Not long ago, the U.S. saw record low numbers of youth smoking traditional cigarettes. With the newest e-cigarette numbers, we are reversing course and creating a generation once again dependent on nicotine.

Schools are seeing vaping in a variety of demographic groups; it crosses socioeconomic and social statuses, including student athletes, all who believe it is harmless and will not impact their performance.

What Can Schools Do

Schools are obligated to take on this challenge and help offset the false narrative being portrayed to our youth. At Canonsburg Middle School (grades seven and eight) we started several initiatives to help educate our community on the harmful impact of vaping.

Education

We teach e-cigarette units in both the seventh and eighth grade knowing that students in these years are quite vulnerable to experimentation. Students learn about the harmful impact of vaping and deceptive marketing techniques. We use a variety of strategies including videos and online resources. The U.S. Department of Health and Human Services, through its *The Real Cost* campaign, has an excellent online resource designed for adolescents with a video game-like approach to discovering the harmful effects of vaping.

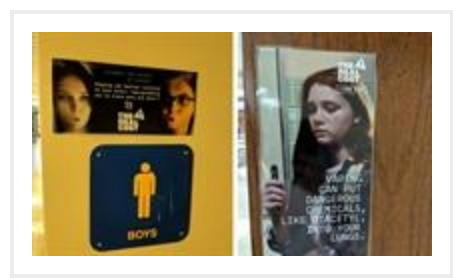
One of the most powerful teaching strategies is simply talking about it in a safe and open environment. The Canonsburg Middle School health teachers and guidance counselors create such a space when discussing this topic.

School-Wide Campaign

Students are getting gentle reminders of the harmful effects of vaping throughout the day at CMS. Our morning announcements are done through a green screen studio by student volunteers. Prior to the announcements, the news crew plays one of the FDA's public service announcements found on YouTube. In addition, we created small posters to strategically place around the school (restrooms, locker areas, and the cafeteria).

Parents

Parents have a tremendous influence on their children, though unfortunately, they do not have a full understanding of e-cigarettes. This lack of understanding is possibly born out of not believing it is something their child would ever consider or not truly believing there are harmful effects. Information on vaping is shared through the school's social media outlets on a regular basis. Also, a presentation specific to vaping was promoted and presented at one of the district's monthly parent council meetings.



Consequences

Students who are caught vaping or having a vaping device naturally receive a traditional in-school consequence. However, and more importantly, the student also receives a one-on-one consultation with our school nurse who reviews the use e-cigarettes. If we find a student is to the point where there is an addiction component, then we make sure to connect the student's parents with our local drug and alcohol agency for added resources and support.

Teachers and Coaches

Finally, we educated our faculty and coaching staff. We wanted to make sure all staff that students encounter during the day understand and deliver the same message about vaping. You can never underestimate the influence of a favorite teacher or coach on a child.

It Takes a Village

Today's adolescents have so many challenges. As educators, we must stay on top of current issues, like vaping, and make a point to educate our student body on these developing topics. After implementing vaping education initiatives at Canonsburg, teachers and administrators have received a positive response from students over the past year, with some students even reporting feeling less pressure to experiment with vaping.

With a continued and collective effort, we can help our students understand how to make healthier and well-informed decisions.

References

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