

VAPING DANGERS INCREASE

'If you're just around it too much, you get...

Mike* drives to school every day. He walks to first period, tired. He plays Spikeball on the Quad during his free period, and quickly tucks in his shirt as he grabs his backpack and rushes to his next class, barely reaching the room on time.

He goes to practice for hours after school, and then drives back home with a five-course load of homework waiting for him.

And when he starts dozing off or loses concentration, Mike glances behind him, making sure nobody's watching through the door.

He opens his drawer, reaches inside and pulls out his Juul. Mike's a Marksman. And he's

...hooked.'

*Mike is a pseudonym for an unnamed Marksman who prefers to remain anonymous.

With vaping becoming a widespread phenomenon in the past couple years, especially with the introduction of Juul into the market, research into the long-term effects is still ongoing.

Through the hospitalization of over 400 people between June and September, the world has been awoken to the potential immediate health risks associated with vaping. Pulmonologist from UT's Southwestern Medical School Johnathon Dowell said the lack of data is a part that is worrisome.

"We worry about whether there are long-term effects regarding cancer," Dowell said. "At this point, there's just not enough long-term data to know what the cancer risk is associated with vaping."

As of Sept. 21, a reported 530 cases of vaping related lung illnesses have been reported, with the first death linked to vaping occurring in Illinois. Many of the cases can be attributed to THC-infused vapor, with Vitamin E acetate becoming a central focus for investigators as a primary cause of illness. However, not all the recorded cases reported the using of THC products.

Having vaped on and off for two years, Mike sees stories in the national news of the health concerns of teen vaping and is petrified.

"I always knew it was bad for my health, and I knew I shouldn't be doing this," Mike said. "But my mom was a smoker. She only smoked for a couple years, but I look at all these stories about smokers and I thought, 'people usually only get cancer if they smoke for 10 or 15 years.' But I'm seeing these news stories of kids who vaped for a year or two and their lungs are collapsing and it's terrifying."

According to the Center for Disease Control, symptoms of lung illness from vaping may include shortness of breath, coughing, chest pain, nausea, vomiting, diarrhea, fatigue, fever or weight loss.

Although these symptoms are not conclusive, they can point to potential risk for lung illness.

However, a major hurdle to stopping vaping is simply the concentration of nicotine combined with young teenage brains susceptibility to addiction. Nicotine affects students' ability to focus, memory and learning. School nurse Julie Doerge says that the age of the user and their executive function plays a major factor.

"We're just so much more quickly impacted with nicotine at 16 than at 21, your addictive qualities of it just go up tenfold," Doerge said. "If you're 21, making this decision, it's a lot better than if you're 16 making this decision about drinking, vaping, or whatever else."

Mike estimates that as of now, he goes through roughly half a Juul pod per day, spending \$15 a week. However, he is currently in the process of trying to hold back. At the height of his addiction, he thinks he was vaping a full pod, even a pod and a half, per day, spending \$30-\$50 a week.

Mike thinks teen vaping has become so common because of its accessibility.

"Honestly, it's easy to get," Mike said. "The age limit has been 18. Everyone knows someone who's 18. I guess it just now changed to 21, but still. Also, there's less stigma. With cigarettes, you could get them if you wanted, but you smell, and no one thinks that's cool. You don't smoke a cigarette at a party. But with vaping, there's nothing that seems wrong with it at first. Right now, I'm trying my hardest to quit, but isn't everyone?"

The recent incidents surrounding vaping have provoked a response from various authorities, such as The National Association of Independent Schools, of which this school is a member, that has released a presentation informing independent learning institutions about

the dangers, and how to combat vaping at schools.

The Trump Administration has made motions to ban flavored e-cigarette cartridges from sale. In addition, Juul attempted to send lobbyists to Trump to discourage the ban.

However, a ban wouldn't fully address the problem. The cases of lung injury are results of possible tampering with the fluids vaporized. The black market will still prove to be an issue, as with all forms of prohibition in the United States.

Dr. Harold Urschel '77, the chief medical strategist at rehabilitation center Enter Health, focuses on treating all types of addiction. But he knows very well about the effects of vaping.

"There's no quality control on the liquid that goes into these devices," Urschel said. "There's no quality control on the manufacturing of these devices. That's why the batteries blow up - because they're cheap."

Urschel describes recent episodes of people being admitted into the ICU with the symptoms of breathing in the toxic gas from an 18-wheeler on the highway. That gas gets into your lungs and messes with your heart. The only common factor between these 120 people? Vaping.

"The liquid that goes into your body with vapes can have all kinds of chemicals," Urschel said. "Even though it says a certain dose of milligrams of nicotine, there's no way to know if it's half that, or twice or even more."

When Mike first started vaping, he found its appeal in the "buzz." If he vaped enough, he said he felt light-headed for a few seconds. But now, the only reason he vapes is his addiction.

"I get a little jittery if I don't have [my vape] for too long," Mike said. "It's also a calming agent. I've done my own research on these things. It can ground you. It can



Hal Urschel '77
Chief medical strategist at
Enter Health Rehab center



Julie Doerge
School Nurse

settle you, once you're already addicted."

E-cigarettes are often marketed as containing less nicotine than cigarettes, and are sold as a less dangerous nicotine source. But a University of California San Francisco study compared 100 students - some who vape, some who smoke and some who do neither - and their results don't match with the marketing suggestion.

"That study showed that the same cancer-causing chemicals that are in cigarettes," Urschel said, "those same

cancer-causing chemicals are in the vapes."

Since E-cigarettes are relatively new, with about six years on the market, there is a lack of evidence to prove how dangerous they are or aren't. But given the circumstances and substances found in vapes, Urschel thinks history is seeming to repeat itself.

"A long time ago, cigarette companies lost huge lawsuits and had to pay billions," Urschel said. "The reason they lost the lawsuits is because they got caught raising the dose of nicotine in

cigarettes. They were told not to, because the more nicotine, the more addicting it is. They didn't listen to that."

Now, e-cigarette companies are doing the same, but it's worse.

There are toxic gases and metallic nano-particles going into people's lungs. There are nicotine addicts, born from the surge of vapes, now looking for recovery help. At Enter Health, Urschel has seen nicotine addiction for a while, even before the rise of e-cigarettes, and he knows the treatment process.

"We give them an assessment to see if they have an anxiety problem or

“MY ADVICE TO THE KIDS WHO HAVEN'T STARTED VAPING YET: I PROMISE IT'S NOT WORTH IT. IF YOU SAY YOU DON'T VAPE, PEOPLE ARE NOT GOING TO JUDGE YOU.”

— MIKE

depression problem," Urschel said. "It all takes about an hour or hour and a half. We give them recommendations, and most people can stop using in about ten days."

Mike has been trying to quit, trying to hold back. But, realistically, he knows he's addicted for life.

"I hope that I can stop actually doing it, but I think it's always going to be a potential trigger," Mike said. "I quit before, for about four months. If you're just around it too much, you get hooked again. I think it's always going to be one of my weaknesses."

Since teenagers have a higher risk to addiction, it makes quitting a difficult task. In addition to that, reaching out for help can also prove hard because of the possible ramifications.

"[Students] don't know what to do," Urschel said. "They can't go to the school because they'll get in trouble, right? Or they can't go to their parents because they feel like they'll get in trouble. They get stuck."

But in reality, it's safe to go to a trusted adult - whether that be a parent, a teacher or an administrator. Assistant Head of Upper School Chris Disimile reassures students that the administration can provide help.

"We would try to get them the help that they need," Disimile said. "That doesn't mean that we change the rules and let that person openly vape on campus, of course, but if somebody came and said, 'I have a serious problem and am addicted to vaping,' we would refer that boy to someone who could help with that, not punish the boys for that admission."

For teens who have been vaping and are suffering from a nicotine addiction, Mike advises them to throw the device away and stay away from vaping as much as possible.

"Maybe even give yourself a week or two to not hang out with your group of friends, if that's the circle that does that a lot," Mike said. "Being around it is so much worse than just trying to quit alone. Just look at the news stories. You don't want that to be you."

The local picture

A poll was taken of 258 Upper School students regarding their experience with vaping. The results are listed below.

78
percent

of Upper Schoolers who vaped regularly admitted to feeling negative side-effects.

12
percent

of Upper Schoolers admitted to having vaped regularly.

14
percent

of Upper Schoolers admitted to having owned or still owning a vape device.

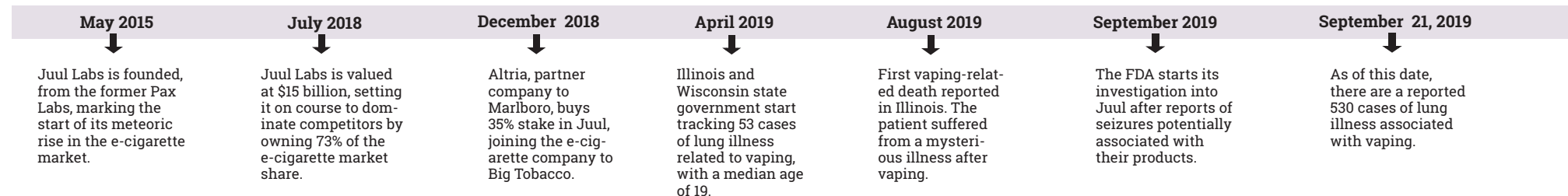
85
percent

of Upper Schoolers admitted to knowing someone at the school who has vaped at least once.

30
percent

of Upper Schoolers admitted to having vaped at least once.

THE TIMELINE



The Rundown

Research involving e-cigarettes has only just begun. Here's some of what we know.

1 Juul pod = 20 cigarettes

1 → One Juul pod equals the nicotine content of 20 cigarettes.

2 → The Journal of the American College of Cardiology says that e-cigarette vapor is toxic to interior blood vessel cells.

3 → Known carcinogens in Juul pods include formaldehyde, diacetyl and pulegone, among others.