Do concentrates going into vape pens need diluents to reduce viscosity?

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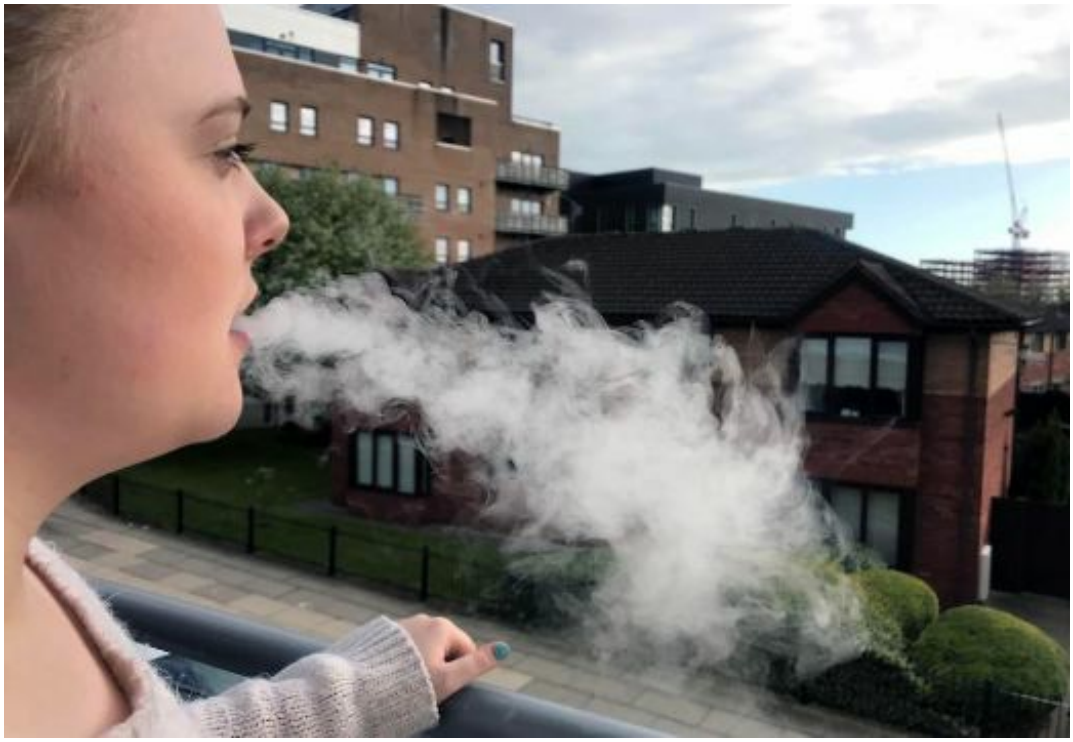

Written by Diana Rangaves

Concentrates are changing the way the public views vape pens. But is it too little too late?

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Between June 28th and August 20th 2019, the Centers for Disease Control reported 193 cases of people affected by tainted vape cartridges. These people suffered from some version of acute respiratory distress. Those affected complained of conditions that resembled lipoid, or oil pneumonia. [1] Something has to be done.

The truth is that diluents for vape pens aren't necessary, nor are viscosity adjustments. The diluents include a class of odorless, tasteless thickening agents. Liquids come in different formulations, both from above-board and underground manufacturers. [2]

While it's true that manufacturers are capable of making vape products with no additives, the reality is that some *are* incorporating these cutting agents. As additives continue to find their ways into vape pens, the industry is scrambling to identify these nefarious products and find safer alternatives to better ensure ethicality and transparency.

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"There is a perfect storm of different problems proliferating in the media around vape products right now," said Kevin Koby of Abstrax Tech. "These problems specifically are the very concerning negative health effects, flavors appealing to children, and black-market products/businesses being confused with licensed producers. These problems themselves and the lines between them are being confused, much like the confusion a consumer faces when trying to find clean, tested, and licensed product."

Juxtaposed to solely focusing on reducing the viscosity via cutting agents, product manufacturers can also explore different hardware options. Steven Bennett, Ph.D., of Prescott Logic Technologies, offered the following advice:

"Producers place a great deal of focus on the viscosity of the oil when producing pens when instead, they should focus on the hardware they select. Two millimeter inlet holes on standard pre-warmed 5/10 thread cartridges can handle raw distillate, so cutting agents are typically needed to adjust oil for improperly selected pens." "It has been our experience that high proof (90%+ cannabinoid), high viscosity distillate performs poorly in most hardware," said Michael Coffin of Bloom Farms. "There are some hardware options that make it work, but the vapor has little to no flavor and none the essence or subtlety of the plant."

“Slow flows mean that distillates tend to dry out the wicking system and often delivers vapor that tastes like burnt rubber,” Coffin added.

For manufacturers, the quest becomes whether or not you want the product to simply be THC or if you’re willing to accept that other factors influence a consumer’s choice. This can be likened to alcohol, as mixed drinks are often more widely preferred than straight spirits.

“In my opinion, the most efficient and ethical way to decrease viscosity would be cannabis-derived terpenes,” said Coffin. “In the absence of that, some plant-derived terpene blends mimic popular cultivars and will solve the fluid dynamics problem. However, these blends can taste like scented cleaning products (PineSol, Febreze, Lemon Pledge, etc.) and seem to be missing key entourage components.”

In legal state-regulated markets, vape pens undergo mandatory lab testing to ensure purity and potency. Illegal markets don’t follow this convention, and some consumers are paying the price. As adulterants and illegal diluents make their way into the market, one thing is becoming increasingly clear — vaping products need to be regulated and controlled.

References

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