



# Vaping of Marijuana Extracts More Common

OSAM-o-Gram

Ohio Substance Abuse Monitoring Network

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Since the first reports of “marijuana vaping” in January 2011, vaporizing as a route of administration (ROA) for marijuana has been reported by respondents in every OSAM region. In fact, during the past two years, the majority of OSAM regions have reported vaporizing as a common ROA (see Table 1).

Table 1. Increase in Vaporizing as a ROA for Marijuana over Time as Reported by OSAM Focus Group Participants

Region	January 2011	June 2011	January 2012	June 2012	January 2013	June 2013	January 2014	June 2014	January 2015
Akron-Canton								Vaporize	Vaporize
Athens			Vaporize	Vaporize	Vaporize	Vaporize	Vaporize	Vaporize	Vaporize
Cincinnati						Vaporize			
Cleveland		Vaporize	Vaporize	Vaporize		Vaporize	Vaporize	Vaporize	Vaporize
Columbus						Vaporize	Vaporize	Vaporize	Vaporize
Dayton		Vaporize		Vaporize		Vaporize	Vaporize		
Toledo			Vaporize		Vaporize		Vaporize		
Youngstown	Vaporize	Vaporize		Vaporize				Vaporize	Vaporize

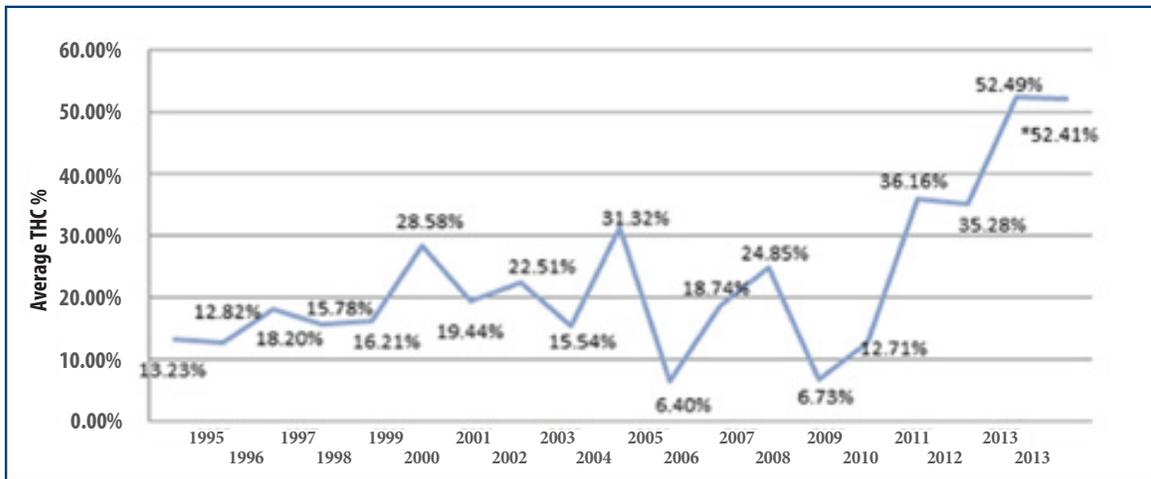
As of OSAM’s most recent report of January 2015, the majority of OSAM regions reported availability of marijuana concentrates and extracts (aka “butane honey oil,” “BHO,” “dabs,” “earwax,” “wax,” or “hash/hashish oil”), which are products derived from medicinal alchemy of marijuana (an extraction of tetrahydrocannabinol, THC, from high-grade marijuana leaves by heating it with butane and creating a brown, waxy, hard substance). These concentrated forms of the drug have been known to contain much higher THC levels. In fact, THC potency has been increasing over time in these marijuana oily by-products, as the U.S. Department of Justice’s Drug Enforcement Agency (DEA) reported in its *National Drug Threat Assessment Summary for 2014* (see Figure 1): “In the 1990s, the average THC content of hash oil, a type of marijuana concentrate, ranged from 13 to 16 percent; today the average THC content of hash oil is 52 percent; one recent sample tested at 82 percent” (page 27).

Six of OSAM’s eight regions (Akron-Canton, Athens, Cincinnati, Cleveland, Columbus and Youngstown) reported increased availability of these marijuana products. Participants suggested that increased availability is due to ready access to tools for the extraction process and to devices for consuming the product, as well as an increase in know-how.

A Cleveland participant explained, “You can make homemade dabs. You use butane . . . that is how you make it. They have . . . butane and you put weed in this tube and then it, like, melts it down and then you have a waxy thing.” Participants commented: “I don’t think [quality of marijuana] can get much better than what it is right now since they came out with dabs or whatever; It’s like 95 percent THC; It triples, quadruples the effect of the buzz.”

Participants from across OSAM regions reported that the most common route of administration for marijuana remains smoking; however, out of 10 marijuana users, participants estimated that one to five users would vaporize marijuana concentrates and extracts. A Cleveland participant explained, “Nowadays, it’s common to smoke dabs ....”

**Figure 1**  
**Average THC Present of All Submitted Hash Oil Samples to NCNRP<sup>1</sup>**



<sup>1</sup>University of Mississippi National Center for Natural Products Research's Potency Monitoring Program (NCNRP)  
 \* Percentage based on preliminary data for 2013; actual percentage most likely higher after all samples tested

Consuming dabs is often done by heating the waxy substance on a hot plate (typically the head of a nail) with a blow torch and inhaling; whereas vaporizing the extracts allows the consumer to basically blend in with all the other e-cigarette users without the use of a blow torch.

There are online instructions on how to make the cannabis liquid compatible with e-cigarette devices and users boast that there is little to no odor with this method, so it's not so easily detected. Furthermore, there are pre-filled liquid cannabis oil tanks (aka "dank tanks") being sold on the Internet that claim compatibility with most e-cigarette and vaporizing devices on the market. The gap between BHO vaporizers and e-cigarettes is quickly closing and it seems like vape pens are conspicuous enough that even if a marijuana user continues to use that device instead of an e-cigarette device, the general public will not know the difference.

OSAM participants reported it is easier to get away with smoking marijuana at a bar using an electronic device. It has been suggested that vaporizing is changing marijuana culture and there are online reviews on the different types of vaping instruments which sell up into the hundreds of dollars. Participants reported that those who vape are typically of a higher socio-economic level.

There are many grave concerns related to the vaporization of marijuana. The extraction process of using butane is extremely dangerous and has resulted in several household explosions. For instance, this past January, law enforcement and firefighters responded to an apartment unit in Huber Heights (Dayton Region) after the apartment's refrigerator exploded, blowing out windows and causing serious damage to the unit; the apartment's tenant admitted to making hashish and causing the explosion (<http://wdtn.com/2015/01/27/exploding-refrigerator-story-doesnt-hold-up/>, Jan. 27, 2015).

There is also concern over increased popularity of vaping among youth. The U.S. Centers for Disease Control and Prevention (CDC) reported that the current use of electronic cigarettes among middle and high school students tripled from 2013 to 2014 (<http://www.cdc.gov/media/releases/2015/p0416-e-cigarette-use.html>, April 16, 2015). The CDC is addressing these concerns with the addition of two questions about electronic vaping to its 2015 *Youth Risk Behavior Survey*. In addition, the Ohio Attorney General's *Law Enforcement Bulletin for September 2014* reported on criminal trends involving teens in which it highlighted the growing popularity of "trippy sticks" (vape pens); the bulletin warns that there are online videos that demonstrate how teens can use them to get high in class without detection.

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