



CANNABIS INTELLIGENCE BRIEFING

# Cannabis Vaping: Opportunities in an Uncertain Future

# EXECUTIVE SUMMARY

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# Cannabis Vaping: Opportunities in an Uncertain Future

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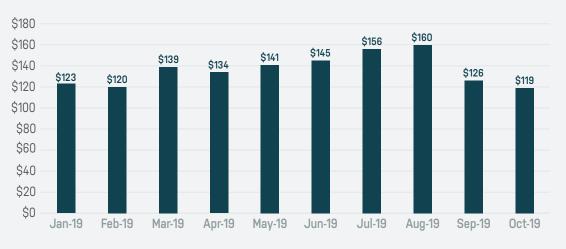




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# Vapes Are Down Recently, but Are They Out?

Manufacturers of cannabis vaporizers, and the consumers who have flocked to those products for convenience and ease of use, have built an industry success story in nearly six years since the first legal adult-use sales began in Colorado in January 2014. The first real setback to the seemingly unstoppable cannabis vape category came Aug. 23, 2019, with the announcement by the director of the United States Centers for Disease Control and Prevention (CDC) of the first death attributable to "e-cigarette, or vaping, product use associated lung injury," aka EVALI. As of a Nov. 20 report by the CDC, a total of 2,290 cases of EVALI and 47 EVALI-related deaths had



## Monthly Vape Sales in 2019 (In Millions)

Note: Data for Arizona, California, Colorado, Nevada and Oregon. Source: BDS Analytics GreenEdge®

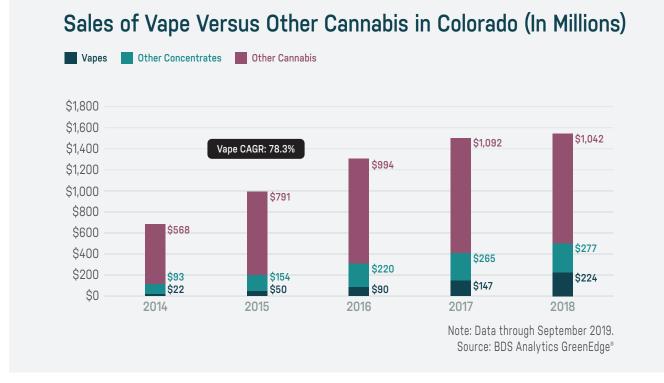




been recorded in the U.S. Nearly all of those have been tied to illicit market products and the use of vitamin E acetate as a low-cost cutting agent.

The announcement of the first death came at the end of a month in which BDS Analytics GreenEdge® retail tracking service data showed combined sales of cannabis vapes across Arizona, California, Colorado, Nevada and Oregon had grown to a record \$160 million a month. The news from the CDC, and the wide and immediate spread of information and misinformation in its aftermath, quickly took its toll: Combined monthly sales of cannabis vapes in those five states plummeted 21% in September and declined a further 5% in October (see Chapter 1: "Impact of the Industry's First Health Scare"). The popularity of various types of vaping helped drive overall cannabis concentrates sales from less than 16% of total cannabis sales in the January 2014 Colorado market to 31% in August 2019, according to BDS Analytics GreenEdge<sup>®</sup> data. Arcview Market Research and BDS Analytics estimate sales of legal cannabis vape products in the U.S. totaled nearly \$1.6 billion in 2018 and had forecast, before the emergence of EVALI, that market growing to \$2.5 billion in 2019 and on to \$10.6 billion in 2024. At the end of September, that forecast, and the future of cannabis vapes in general, was very much in doubt.

Cannabis vaping is not new (see Chapter 2: "Vape History and Technology"), but a combination of new technologies and shifting consumer tastes brought it to new



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prominence as sales of cannabis products became legal across the majority of states in the U.S. The key development has been the shift from smoking or vaporizing dried flower to vaping concentrates in both pre-loaded disposable devices and replaceable cartridges.

The growth of cannabis vaping has generally followed the path blazed by the burgeoning nicotine vaping market. According to Statista, e-cigarette sales reached \$3.6 billion in 2018, seen by consumers as a healthier alternative to smoking. Decades of research show that cigarette smoking is the leading cause of preventable death from cancer, heart disease, stroke, diabetes, emphysema, chronic bronchitis and other health problems. According to the CDC, cigarette smoking results in more than 480,000 deaths each year in the U.S. an average of 1,300 deaths each day—and more than 16 million Americans are living with a smoking-related disease.

While the assertion that nicotine vapes are safer than cigarettes is not totally proven, it seems like a logical assumption given, with vaping, the elimination of a host of dangerous contaminants found in cigarette smoke. But while cigarettes have been subjected to decades of scrutiny by health researchers, vapes have not so far.

Those who prefer to consume cannabis via vaporizer have largely been drawn to it, not by safer consumption, but rather by ease of use, convenience and other factors—according to BDS Analytics Consumer Insights research (see Chapter 3: "The Rise of Cannabis Vapes"). But the recent illnesses and deaths from EVALI have already changed consumers' purchasing habits and may change overall consumer attitudes about cannabis vapes, at least in the near term. The degree of this change will start to emerge in the fourth-quarter wave of cannabis consumer research from BDS Analytics, expected to be released shortly.

This report contains the point-of-sale tracking and consumer research data showing the popularity of cannabis vaping and the reasons for it. It also contains the reasoning behind our theory—shared by many senior executives we have spoken with—that, far from spelling the demise of one of the legal cannabis business' fastest growing product categories, the EVALI scare may simply highlight the need for legalization and regulation and ultimately result in people having stronger reasons to buy their vapes from licensed and regulated retailers.

The hysteria caused by lack of clear data is starting to be replaced by facts: that the deaths were largely the result of consuming illicit market cannabis vape products, not those from the tested and regulated legal cannabis markets. In any case, the EVALI crisis underscores the importance and urgency behind making cannabis legal nationwide and enacting a comprehensive regulatory framework that enables further elimination of the illicit market (see Chapter 4: "The Future of the Vape Market").

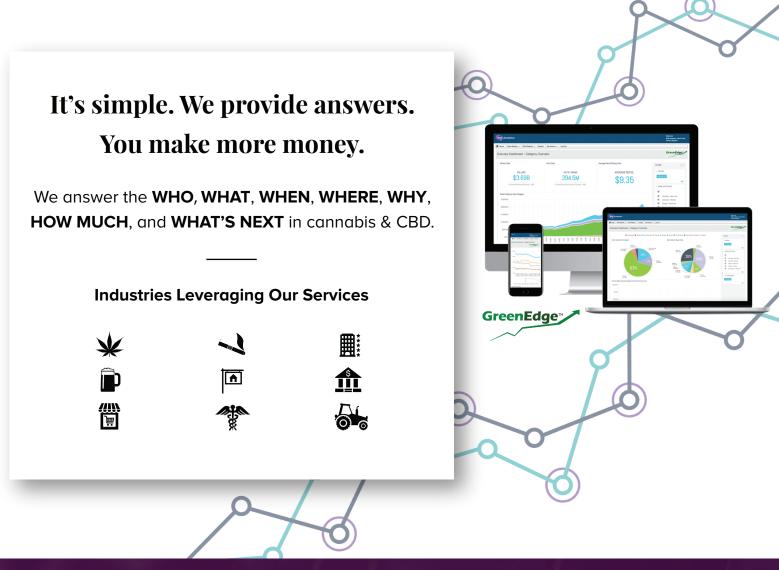




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# **Letter From the Editor**

Prohibition has caused many tragedies, none worse than the nearly four dozen deaths from Aug. 23 to Nov. 20, now attributed to vitamin E acetate used as a cutting agent in some nicotine and cannabis vape products—the vast majority of which were produced by illicit-market manufacturers and obtained from unlicensed sellers.

Federal prohibition long ago led to the complete abdication by federal health authorities of their public health responsibilities when it comes to cannabis, probably the most widely used product to which they have ever turned a blind eye. That left doctors scratching their heads when people started showing up in emergency rooms with what became called "e-cigarette, or vaping, product use associated lung injury," aka EVALI.

The relatively benign and often therapeutic experiences most people have with cannabis stands in such stark contrast to their experience with the world's other favorite inhalable product, tobacco, which is the country's leading cause of preventable death. Unfortunately, the EVALI crisis has, for the first time, linked these two very different products in the minds of the public.

While the vape crisis has hurt sales, it also highlights the urgent need for legalization. The majority of the illnesses and deaths now attributed to EVALI would never have

happened had cannabis been legal in all states, allowing health authorities to ensure the safety of allowable additives in derivative products.

We hope this report helps guide what can now be a rational process of bringing cannabis into legal consumer goods channels, regulated stringently enough on the health science front that consumers know what they are buying but lightly enough on the tax and business regulation side to allow licensed operators to chase out the bad actors. The only way to prevent similar tragedies in the future is to create a well-regulated legal industry to replace the illicit market that tens of millions of otherwise law-abiding adults have been forced to resort to during cannabis prohibition.



**Tom Adams** Editor in Chief Arcview Market Research Managing Director BDS Analytics





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