

## STATE REPRESENTATIVE

# Jesse James

September 30, 2021:

Thank you Chairwoman Magnafici and other committee members for hearing Assembly Bill 440, and for allowing me to testify today. My hope is to share knowledge on this topic, explain what butane hash oil is, how it is made, and why it is important to address the butane extraction of resin from marijuana plants and providing a penalty.

BHO (Butane Hash Oil or Butane Honey Oil) is a concentrated extraction of cannabis that has a THC concentration of up to 90%, making it the most potent marijuana concentrate in the world. While the THC flower may contain at most 30 percent THC, BHO extracts can contain 90 percent THC and above. BHO can also be known as butane honey oil due to its color and consistency. BHO or dabbing is the term used to refer to all concentrates that have been produced through butane hash oil extraction – this is the umbrella term for shatter wax and everything else. BHO comes in many different consumable forms but wax and shatter are two most common and popular terms in the BHO world. Wax is a soft and honey-colored concentrate that is easy to break apart and dab. Shatter is a solid, translucent, glass-like substance which breaks apart in shards. Shatter can have up to 80 percent THC. BHO budder is another form as well. It has a soft, butter-like substance and can have 90 percent THC or above. Budder is harder to come by than other BHO extracts.

What is a BHO extraction? I wanted to find the simplest picture in an attempt to show you what the BHO extraction process looks like. Please see the attached image:

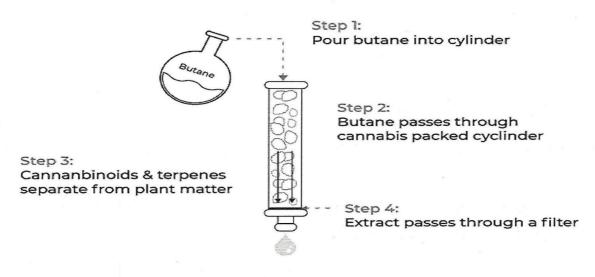
(\*Image from website: PRECISION EXTRACTION SOLUTIONS\*)



## STATE REPRESENTATIVE

## Jesse James

#### **OPEN-LOOP SYSTEM**



Result: Butane Hash Oil

The use of butane is dangerous in this process, period, but more so if not done correctly. Butane is an odorless and highly-flammable liquid, having a low boiling point. Modern methods, using the closed-loop system remove the possibility of gas leaking, as it contains all of the flammable solvents within these closed-looped systems, but these are usually commercial-grade systems, used in a controlled environment. This process is safer, controlled, and effective compared to the open-loop system shown above.

The open-loop system is what we are seeing the most being used in homes, college dorms, hotel/motel rooms, etc. Using this method the butane used for extraction is released into the environment and atmosphere. A simple foot dragging across the carpet, creating an electro-static charge, or a simple spark from anything can easily cause a deadly explosion. If you google 'butane hash oil explosion' you will come across over 4,600,000 hits.

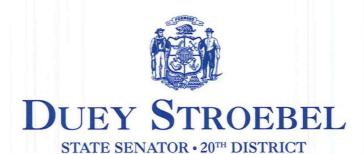


## STATE REPRESENTATIVE

# JESSE JAMES

My agency was involved in locating a BHO operation in the Chippewa Valley. Someone rented a room in a local hotel and left some of their product behind. The substance found looked like honey poured onto a piece of wax paper. When we asked our drug task force personnel about it, they said identified it as BHO and the value of product found was approximately \$7,000. We were able to get video, the vehicle involved, and ultimately the identity of those involved. It was a bigger operation than we initially thought and arrests were made.

So why is this bill being introduced? The criminal elements and punishments of possessing, manufacturing, and delivery of BHO is the same as marijuana. I understand marijuana is needed to make BHO, but the process is making a totally different product, with a higher potency, which sells at a higher rate, putting the lives of those who manufacture it and others at risk. Those who make BHO are intentionally doing so, knowing the dangers and risk, but are not taking it into consideration. Our drug task force partners were the ones who asked me to introduce this legislation and this is why we are here today. Thank you for your time and consideration and looking at increasing the penalties for this dangerous process.



#### **Testimony on AB 440**

September 30, 2021

Thank you Chairman James and members of the Assembly Committee on Substance Abuse and Prevention for holding a public hearing on AB 440. This legislation seeks to establish a statutory distinction between the classification and penalties for traditional marijuana and high-potency butane hash oil (BHO). AB 440 creates steeper penalties for the manufacture and possession of BHO. Despite the significant differences between traditional marijuana and BHO, current law treats the two substances as one and the same.

Commonly referred to as dabs, shatter or wax, BHO is one of the most potent forms of cannabis, featuring delta-9-THC levels up to 90 percent. BHO is a cannabis concentrate manufactured by pressurizing and washing butane over the marijuana plant and collecting the solution that results from the extraction process. The end product is often ingested through vaping or by adding it into baked goods.

For starters, the production of BHO is quite dangerous. There have been a growing number of incidents being reported in recent years that resulted in hospitalizations for severe burns.<sup>2-3</sup> This applies to both states that have and have not legalized marijuana.<sup>4</sup>

The consumption of BHO also carries its own set of harms, both for users and society as a whole. There is a strong association between the use of high-potency cannabis and the development or amplification of mental health and substance use disorders. <sup>5-7</sup> The adverse effects are even more pronounced among youth and young adults. <sup>8-9</sup> This is especially troubling given the fact that regular cannabis use has been steadily climbing to record levels in younger age groups. <sup>10-11</sup>

The societal harms stemming from more prevalent and more potent cannabis is well-established in research exploring the effects on public safety and violent crime, traffic safety and the workforce. 12-14 The narrative surrounding the alleged medical benefits of cannabis tends to readily dismiss the aforementioned harms.

It's in response to the aforementioned harms that states who recently legalized marijuana have implemented or considered THC potency caps in their regulated markets. <sup>15-16</sup> The UN recently called for the same. <sup>17</sup> Of course, the black market and the crime problems that come with it have not gone away in the states that have embraced the unfettered commercialization of cannabis. <sup>18-20</sup> Since it is likely to come up in the discussion on this bill, it bears mentioning that lawmakers in these states have chased the lure of increased tax revenues and ending the so-called mass incarceration of "first-time, low-level, non-violent" drug offenders. For context, drug possession was the most serious offense for 3.7% of our country's state prison population in 2018. <sup>21</sup> As of the mid-2018, only 0.3% of Wisconsin prisoners had a conviction solely for a cannabis-related offense. <sup>22</sup> In 2019, only 0.23% of Wisconsin prison admissions were for cannabis cases that did not include more serious crimes. <sup>23</sup>

Thank you again Chairman James and members of the committee for your consideration of AB 440.

<sup>&</sup>lt;sup>i</sup> Link to References (case-sensitive): https://bit.ly/3EorGHj

#### References:

- <sup>1</sup> Tista Ghosh et al. (2015). Medical Marijuana's Public Health Lessons Implications for Retail Marijuana in Colorado. The New England Journal of Medicine. 372. 991-3. 10.1056/NEJMp1500043.
- <sup>2</sup> Kathleen S. Romanowski et al., Butane Hash Oil Burns: A 7-Year Perspective on a Growing Problem, *Journal of Burn Care & Research*, Volume 38, Issue 1, January-February 2017, Pages e165—e171, https://doi.org/10.1097/BCR.0000000000000334 
  <sup>3</sup> Cameron Bell et al. Butane Hash Oil Burns Associated with Marijuana Liberalization in Colorado. *J Med Toxicol*. 2015;11(4):422-425. doi:10.1007/s13181-015-0501-0
- <sup>4</sup> Ihsan Al-Zouabi et al. Butane hash oil and dabbing: insights into use, amateur production techniques, and potential harm mitigation. *Subst Abuse Rehabil*. 2018;9:91-101. Published 2018 Nov 2. doi:10.2147/SAR.S135252
- <sup>5</sup> Marta Di Forti et al. The contribution of cannabis use to variation in the incidence of psychotic disorder across Europe (EU-GEI): a multicenter case-control study. The Lancet Psychiatry. 2019;6(5): 427-436. https://doi.org/10.1016/S2215-0366(19)30048-3 
  <sup>6</sup> Lucia Sideli et al. Cannabis Use and the Risk for Psychosis and Affective Disorders. J Dual Diagn. 2020 Jan-Mar;16(1):22-42. doi: 10.1080/15504263.2019.1674991. Epub 2019 Oct 24. PMID: 31647377.
- <sup>7</sup> Mark Olfson et al. Cannabis Use and Risk of Prescription Opioid Use Disorder in the United States. Am J Psychiatry. 2018 Jan 1;175(1):47-53. doi: 10.1176/appi.ajp.2017.17040413. Epub 2017 Sep 26. PMID: 28946762; PMCID: PMC5756122.
- <sup>8</sup> Lindsey A. Hines et al. Association of High-Potency Cannabis Use With Mental Health and Substance Use in Adolescence. *JAMA Psychiatry*. 2020;77(10):1044–1051. doi:10.1001/jamapsychiatry.2020.1035
- <sup>9</sup> Nora D. Volkow et al. Prevalence of Substance Use Disorders by Time Since First Substance Use Among Young People in the US. JAMA Pediatrics. March 29, 2021. doi:10.1001/jamapediatrics.2020.6981
- <sup>10</sup> John E. Schulenberg et al. (2020). Monitoring the Future national survey results on drug use, 1975–2019: Volume II, College students and adults ages 19–60. Ann Arbor: Institute for Social Research, The University of Michigan. Table 3. Available at http://monitoringthefuture.org/data/20data/table3.pdf
- <sup>11</sup> John E. Schulenberg et al. (2020). Monitoring the Future national survey results on drug use, 1975–2019: Volume II, College students and adults ages 19–60. Ann Arbor: Institute for Social Research, The University of Michigan. Figure 5-3b Available at http://www.monitoringthefuture.org/pubs/monographs/mtf-vol2\_2019.pdf#page=184
- <sup>12</sup> Tabea Schoeler et al. (2016). Continuity of cannabis use and violent offending over the life course. *Psychological Medicine, 46*(8), 1663-1677. doi:10.1017/S0033291715003001
- <sup>13</sup> Wayne R. Ott, et al. Measuring indoor fine particle concentrations, emission rates, and decay rates from cannabis use in a residence, Atmospheric Environment: X, Volume 10, 2021, 100-106, ISSN 2590-1621, https://doi.org/10.1016/j.aeaoa.2021.100106.
- <sup>14</sup> Russell S. Kamer et al. Change in Traffic Fatality Rates in the First 4 States to Legalize Recreational Marijuana. *JAMA Intern Med.* 2020;180(8):1119–1120. doi:10.1001/jamainternmed.2020.1769
- <sup>15</sup> Quest Diagnostics. Marijuana Workforce Drug Test Positivity Continues Double-Digit Increases to Keep Overall Drug Positivity Rates at Historically High Levels, Finds Latest Quest Diagnostics Drug Testing Index Analysis. May 26, 2021. Available at https://bit.ly/3zehiOz
- <sup>16</sup> National Academies of Sciences, Engineering, and Medicine. The Health Effects of Cannabis and Cannabinoids: The Current State of Evidence and Recommendations for Research. Washington (DC): National Academies Press (US); 2017 Jan 12. 4, Therapeutic Effects of Cannabis and Cannabinoids. Available from: https://www.ncbi.nlm.nih.gov/books/NBK425767/
- <sup>17</sup> Enrolled 2021 Montana House Bill 701, Section 5 Subsection (8). Available at https://legiscan.com/MT/bill/HB701/2021
- <sup>18</sup> Enrolled 2021 Colorado House Bill 1317, Section 1. Available at https://legiscan.com/CO/text/HB1317/2021
- <sup>19</sup> World Health Organization. World Drug Report 2021. United Nations publication, Sales No. E.21.XI.8, (p. 41). Accessed at https://www.unodc.org/res/wdr2021/field/WDR21\_Booklet\_3.pdf#page=41
- <sup>20</sup> Amanda C. Lewis (2021). The Half-Legal Cannabis Trap. *Politico*. https://www.politico.com/news/magazine/2021/02/09/los-angeles-legalization-cannabis-criminalization-467572
- <sup>21</sup> Naomi Martin (2019). Why most Mass. Marijuana sales are on the black market, two years after legalization. The Boston Globe. https://www.bostonglobe.com/news/marijuana/2019/02/02/illicit-pot-market-remains-stubbornly-robust/Fqq5baxLvgkrTB1ABJRbEL/story.html
- <sup>22</sup> Public Meeting of the New Jersey Legislative Black Caucus. Recreational marijuana hearings; first of three (2018) (Testimony of Todd G. Raybuck). Accessed at https://www.njleg.state.nj.us/legislativepub/pubhear/njlbc02212018.pdf#page=84
- <sup>23</sup> E. Ann Carson (2020). Prisoners in 2019. U.S. Department of Justice, Bureau of Justice Statistics. Washington, D.C., NCJ255115, Table 13. Accessed at https://bjs.ojp.gov/content/pub/pdf/p19.pdf#page=20
- <sup>24</sup> Wisconsin Policy Forum (2019). A Clear-Headed Look at Marijuana Policy. Accessed at https://wispolicyforum.org/research/a-clear-headed-look-at-marijuana-policy-assessing-the-governors-proposals-and-their-impacts-on-the-state/
- <sup>25</sup> Julie Grace (2021). Few marijuana offenders in prison. Badger Institute. Accessed at https://www.badgerinstitute.org/BI-Files/Reports/2021\_Marijuanabrief\_final.pdf

### **BUTANE HASH OIL/THC EXTRACTS**

Chairman James, Vice-Chair Magnafici and other committee members, thank you for having this hearing today on this issue. I would like to share with you why this legislation is important:

Since becoming an investigator with the Eau Claire County Sheriff's Office and West Central Drug Task Force in 2013 I have seen an increasing trend in the presence of THC concentrates and/or extracts. These extracts are referred to by different names to include "wax", butane hash oil or "BHO", "shatter", and "oil", among others. The most common extract produced locally is BHO. BHO is the end result of the process of removing the THC from the marijuana "bud" with liquid butane. The butane is then either evaporated or removed via vacuum or heat. As you can imagine, using heat can be extremely volatile due to the flammable nature of butane. Once the butane has been removed, the final product is a waxy, sticky substance that is commonly referred to as BHO. The THC content of BHO can be as high as 90% whereas the average THC content of marijuana "bud" is roughly 15%, according to the U.S. Drug Enforcement Administration.

Why is all of this information important? It all comes down to safety. One of the ways of producing the THC extract is using butane. Butane is extremely flammable and if the users do not remove the butane from the THC properly, there can be catastrophic consequences including BHO lab explosions. These explosions not only can be dangerous to those using them but to the surrounding neighbors as well.

Other dangers associated with BHO are the affects on health. Drugabuse.gov has stated that THC extracts/concentrates deliver a large amount of THC to the body quickly. This increases the likelihood of addiction and/or physical dependence to THC. It's also believed that higher amounts of THC increase the likelihood of anxiety, paranoia, and even psychosis. Beyond the increased levels of THC, other components of extracts have been found to be dangerous. In some THC vape cartridges, labs have found various types of pesticides and mold which pose other health issues. As with any type of smoking, marijuana and THC extracts can cause respiratory issues to users as well. Marijuana proponents have claimed that marijuana does not cause the health risks as other illegal drugs or even alcohol. However, the dangers associated with concentrates/extracts are becoming greater and greater.

Wisconsin has also seen an increase in THC vape cartridges being used and distributed amongst the younger generations (18-35 year old). THC vape cartridges are easier to conceal and often do not have the strong odor that smoking marijuana would have. They are often shipped in from marijuana "source states" but there are still a number of black market producers of THC vape cartridges. Like many industries, there will always be someone to make the same product for a

cheaper price, often at the cost of safety. The black-market cartridges are where many of problems have occurred with pesticides, mold, and butane or other chemicals still being present in the THC.

In summation, THC extracts/concentrates like BHO or "wax" currently fall under the same category and statute as marijuana/THC. However, "run of the mill" marijuana has a much lower THC content and has caused far fewer side effects than concentrates or extracts. The production of extracts or concentrates is also far more dangerous than the production of marijuana. Furthermore, investigations and interviews I have conducted with various individuals who have used both, have stated that the highs between the two are drastically different. There have been cases where the use of high THC content substances, including BHO, have caused respiratory issues as well as psychosis. I don't feel that it is appropriate to have THC extracts/concentrates included in the same statute as marijuana. Though both substances main component is THC, the substances and their effects are drastically different. For this reason, THC extracts/concentrates should be classified by itself with it's own penalties and weight thresholds.