

October 27, 2017

Judge William H. Pryor, Jr., Chair
United States Sentencing Commission
One Columbus Circle, N.E., Suite 2-500
Washington, DC 20002-8002

RE: Request for Public Comment (BAC 2210-40) - Synthetic Drugs

Dear Judge Pryor:

The Drug Policy Alliance appreciates this opportunity to provide comments as the Commission undertakes a multiyear study of offenses involving synthetic cathinones (such as methylone, MDPV, and mephedrone) and synthetic cannabinoids (such as JWH-018 and AM-2201), as well as tetrahydrocannabinol (THC), fentanyl, and fentanyl analogues with the intention of determining appropriate guideline amendments. We understand that the substances of current interest are synthetic cathinones, tetrahydrocannabinol (THC), and synthetic cannabinoids. We provided comment in response to your March 2017 announcement and are pleased to expand upon those remarks today.

The Drug Policy Alliance (DPA) works to increase the degree to which problematic drug use is treated as a health issue and advances evidence-based drug policy grounded in compassion and human rights. We accordingly oppose policies that predominantly rely on the criminal justice system to address drug use. DPA educates lawmakers at both the federal and state level about illicit drugs and effective policy responses that reduce harms both from drug use and drug prohibition.

We take the same approach to all novel psychoactive substances (NPS) – a belief that we can best protect the public’s health, not through criminalizing these substances, but by focusing on the underlying reasons for their demand and offering smart, evidence-based strategies for preventing their use, reducing their harm, and treating those who may be using them problematically. As we detail more fully below, criminalization causes many harms, including by restricting research into the potential benefits of these substances; leading to proliferation of newer, and often more dangerous NPS; and saddling people with a criminal record that can damage their future prospects.

In 2016, DPA co-hosted a summit in New York titled *New Strategies for New Psychoactive Substances*, which brought together more than 30 scholars, activists, service providers and people who use drugs to share what is currently known about NPS, identify areas for future NPS research, discuss strategies for intervening when NPS use becomes harmful and for new forms of NPS drug regulation, and explore how messaging and media about NPS can become more constructive.¹ Synthetic cannabinoids received special attention at the convening. What follows are some of the findings from this convening.

People use NPS for a multitude of reasons, not least of which to cope with everyday struggles and experience pleasure. There are anecdotal reports that some people use synthetic cannabinoids and other NPS as a replacement therapy to manage withdrawal from heroin and other substances. Since NPS are generally not detectable by most conventional drug screening panels, many individuals also use NPS as a substitute for marijuana and other illicit substances that are prohibited as a condition of maintaining employment, court-ordered supervision or access to services.

People are known to use NPS to maintain employment, including individuals working in occupations where drug testing is routine such as law enforcement and military service. Drug testing is often a condition of receiving social services such as temporary housing and public assistance, which can incentivize people who rely on these services and have a substance use disorder to substitute NPS for illicit drugs or alcohol. The same holds true for individuals who are under court-ordered supervision and must submit to drug testing as a condition of probation or parole or are subjected to drug testing as a condition of remaining enrolled in substance abuse treatment.

NPS use has been documented among law enforcement and military ranks and in other professions, in both rural and urban communities and across socioeconomic groups. However, the media's portrayal of people who use NPS has skewed toward some of the most visible people in society and especially in urban centers. Individuals who are homeless or lack permanent housing and who often suffer from co-occurring substance use and mental health disorders are heavily profiled by the media. Sensationalist and dehumanizing media reports of "zombies" highlight extreme cases that have heavily influenced policymakers' efforts to criminalize these substances.

As far as drug-specific knowledge, speakers at the convening covered the following. Synthetic cathinones, also known as "bath salts," have effects sometimes reported to be like other psychostimulants. Despite widespread media attention throughout the country over the past few years, relatively few people are using synthetic cathinones compared to other drugs. Calls to poison control centers peaked in 2012 with 2,697,² but continued to decline in each subsequent year (998 in 2013, 587 in 2014, and 522 in 2015). The Monitoring the Future survey of 8th-12th graders showed no more than 1% of 8th graders had tried synthetic cathinones in the past year for 2012-2015, less than 1% of 10th graders, and around 1% of 12th graders.³ Because they are cheaper to produce, synthetic cathinones are often found in drugs sold as "molly" meant to be MDMA. MDPV was banned in 2011 in the U.S. followed by many other synthetic cathinones in 2012. While this ban prevented synthetic cathinones from being openly sold at retailers, it simply shifted supply to the internet and individual sellers.

A similar outcome has emerged for synthetic cannabinoids. The first and most well-known synthetic cannabinoids in laboratory research are the JWH Series, but soon after those were banned, newer and less researched synthetic cannabinoids, such as XLR-11,⁴ AB- PINACA,⁵ and AB-FUBINACA⁶ were found in products that were still legal. Many of these substances have different chemical structures than THC, the main psychoactive ingredient in marijuana, and are full agonists at cannabinoid receptors, which can cause

them to produce very different effects than THC,⁷ which is a partial agonist. The number of emergency room visits associated with synthetic cannabinoids rose sharply in the early 2010s, with the most recent national numbers reaching almost 30,000 in 2011.⁸ Calls to poison control centers started climbing around the same time frame, going from a couple thousand in 2013 to almost 8,000 in 2015, although the number of calls dropped to less than 2,700 in 2016.⁹

Reportedly manufactured in clandestine labs in Asia, the formulations of synthetic cannabinoids are constantly changing as the labs attempt to work around laws¹⁰ prohibiting them. From a user standpoint, this means that brands often contain an inconsistent and unreliable combination of synthetic cannabinoids.¹¹ Synthetic cannabinoids are used, in part, because of marijuana prohibition.

A clear conclusion from the convening was that prohibition is driving the rapid emergence of new NPS compounds that are exacerbating dangers to public health. Without legal regulation or access to drug checking services, it's impossible for people to know what they're getting, especially when newer and lesser known drugs continue to emerge as soon as their predecessors are banned.

Banning NPS compounds by placing them in Schedule I of the federal Controlled Substances Act has not stopped manufacturers from selling these substances - such as those under review by the Commission - or creating new compounds that skirt existing laws. Criminalization only incentivizes manufacturers to invent new substances to replace what was banned. As this process repeats, chemical compounds are manipulated in ways that have never been studied for their health effects, potentially increasing - not mitigating - the dangers to public health.

Because NPS are constantly changing, people cannot know the exact drugs they are taking, how the drugs will physically or emotionally affect them, or how they will interact with medications and other substances. Law enforcement may argue that the rapid evolution of these substances warrants harsher sentences and more aggressive prohibition. This, however, is exactly what incentivized the production and marketing of synthetic cannabinoids and synthetic cathinones as a legal alternative to illicit substances.

The Commission is weighing what the specified NPS compounds actually do and which existing scheduled drug is "the most closely related controlled substance" to these NPS compounds for the purposes of sentencing a person to a term of incarceration. Apart from anecdotal reports from law enforcement, emergency room physicians, and limited data from government surveys and exposure reports from poison control centers, little is actually known about NPS and much of the existing research on NPS does not reflect the experiences of people who use drugs or the on-the-ground reality of why and how people are using NPS and their effects. Little is known about the substances themselves, their effects, the epidemiology of their use, or interventions and policies to reduce their harms. Similarly, little is known about the "potential for addiction and abuse, the pattern of abuse and harms associated with abuse" of NPS, including those compounds that are the focus of the Commission's two-year study. The actual risk profile of various NPS are not

well known. There are insufficient data on prevalence and the effects of these substances on health to definitively understand the risks associated with use.

It is our view that the Commission's evaluations of the specified NPS compounds under its review should be informed by epidemiological research that surveys a broad population to better understand how widespread the use of NPS is as well as adverse effects from using these substances. Ethnographic research is also needed to understand the range of reasons why people choose NPS over other substances, exactly how they are using them, and what factors impact choices to use or not use NPS. Decisions regarding the appropriate sentencing guidelines should be based on the best possible and most rigorous science.

The Commission has indicated that it is considering establishing a broad-class based approach to synthetic cannabinoids and synthetic cathinones for sentencing purposes. Given the scarcity of scientific information on the pharmacological properties of many of the synthetic cannabinoids and cathinones that have been identified on the illicit market, and the varying degrees to which some of these substances may pose health risk, including some substances that may pose little or no acute health risk, it would be imprudent to hold all of these substances to one standard for the purpose of sentencing a person to a term of incarceration.

There are currently too many distinct synthetic cannabinoids and cathinones on the illicit market, and many more such compounds under routine production, that have not been sufficiently studied to assess the potential for abuse and health risks associated with consumption to gauge an appropriate sentence. It is important to acknowledge in this context how Congress has failed to appropriately consider the scientific evidence assessing potential for abuse and health risks as well as medical value when scheduling drugs. The placement of marijuana (cannabis) on Schedule I of the federal Controlled Substances Act has been widely recognized as an appropriate classification when the scientific evidence demonstrating the medical value of marijuana and low potential for abuse is considered.

Marijuana is just one example of inappropriate drug scheduling and attendant application of penalties by Congress. In 2016, both houses of Congress were preparing to take up legislation¹² that would have added more than two hundred unique NPS compounds to Schedule I. However, when the U.S. Department of Health and Human Services reviewed the list of compounds in the proposed legislation, only 21 compounds listed in the legislation were scientifically proven to demonstrate potential for abuse. Many of the listed compounds did not have abuse potential, and some were not even psychoactive. Furthermore, some scientific organizations expressed concern that some of the listed compounds had important applications in scientific research. On that basis the proposed legislation was amended to delete all but the 21 compounds that were verified by available scientific information as meeting the statutory definition of a Schedule I substance.

This NPS legislation in Congress was drafted and introduced without consultation from

scientific experts or review of the available scientific evidence that would support the proposed scheduling designation for the more than 200 unique NPS compounds originally contained in the proposed legislation. The Commission should not follow the same path and assign a blanket designation to a large group of NPS substances.

How the Commission may decide to set guidelines with respect to the NPS compounds currently under review will influence lawmakers at both the federal and state level who must make policy decisions about NPS. A decision to make sentencing guidelines for offenses involving the specified NPS compounds excessively punitive could influence lawmakers to pursue more aggressive criminalization with serious consequences.

For example, since Congress last added NPS compounds to Schedule I in 2012, hundreds of new chemical compounds have been created and distributed for sale in the United States. The Drug Enforcement Administration has also added NPS compounds to Schedule I using both its emergency scheduling and rulemaking authority. Each compound added to Schedule I triggers the application of federal drug sentencing laws. Because there is a lack of common understanding as to what constitutes an ordinary psychoactive dose for many of these NPS compounds, Congress has not specified quantity triggers, meaning people who struggle with addiction can face draconian sentences for miniscule amounts of any substance added to Schedule I. In this scenario, an individual could be charged with distributing or intending to distribute what is in fact intended to be possession of a quantity of NPS for personal use.

THC, which is available to many Americans through legal medical marijuana programs, differs from the NPS we have been discussing. In contrast to synthetic cathinones and cannabinoids about which relatively little is known, there is a large body of research validating the therapeutic properties of THC, one of the compounds that occurs naturally in the cannabis plant. While there are likely many active ingredients in medical cannabis, THC is known to be effective in treating pain and nausea. A literature review of 38 studies evaluating medical marijuana's efficacy for treating pain found that "71 percent concluded that cannabinoids had empirically demonstrable and statistically significant pain relieving effects, whereas 29 percent did not."¹³ More recently, a 2015 meta-analysis of 79 studies found a 30 percent or greater reduction of pain with the use of cannabinoids compared to placebos.¹⁴ Multiple studies have shown that neuropathic pain, one of the most difficult conditions to treat and common among cancer and HIV patients, also responds to THC.¹⁵ Wasting and weight loss related to HIV and anorexia were found to respond significantly to 5mg of a synthetic version of THC (Dronabinol).¹⁶

Schedule I designation of THC, as well as NPS, erects regulatory and funding barriers to research that make it far more difficult for researchers to get support from their sponsoring institutions to investigate these substances. Moreover, criminalization of both THC and NPS can exacerbate health risks from using drugs, by pushing risky behavior underground and making it more difficult for health authorities to study impacts on public health and get help to people who need it the most.

Criminalizing people who use and sell drugs can also amplify the risk of fatal overdoses

and diseases, increases stigma and marginalization, and drives people away from needed treatment, health and harm reduction services. For example, fear of arrest is the most common reason that witnesses do not immediately call 911 in the event of an overdose.¹⁷ The stigmatization of people who use and sell drugs is pervasive in society and it creates major barriers to treatment, health care and other vital services.¹⁸

Moreover, the use of scarce government funds to enforce, prosecute, and incarcerate people who use NPS substances puts further strain on criminal justice resources. The criminalization of people who use or possess personal quantities of drugs is also a major driver of mass arrests in the United States. Each year, U.S. law enforcement makes more than 1.5 million drug arrests – more arrests than for all violent crimes combined. The overwhelming majority – more than 80 percent – are for possession *only*.¹⁹

Black people are far more likely to be arrested for drug possession and use, even though rates of reported drug use do not differ substantially among people of different races and ethnicities.²⁰ Disparate enforcement of drug possession laws and harsh sentencing requirements have produced profoundly unequal outcomes for people of color, who experience discrimination at every stage of the judicial system.

People who are incarcerated are held in environments where risks of contracting or transmitting HIV and hepatitis C are greatly elevated, with insufficient testing, prevention, treatment and other public health services.²¹ Even after a person completes a period of incarceration, a criminal conviction for drug possession can result in the temporary or permanent loss of child custody, voting rights, employment, business loans, licensing, student aid, public housing and other public assistance. These “collateral consequences” of drug convictions intensify the struggles individuals face on the road to recovery and rehabilitation.

While outside of the purview of the USSC, the most effective way to reduce harms associated with NPS are harm reduction and treatment programs, which connect people to services – especially housing and employment. There are other potential approaches to regulating NPS use other than outright prohibition and criminalization.

In July 2013, New Zealand’s parliament enacted a historic law that created an FDA-like process for approving NPS if their relative safety can be demonstrated. While the outlines of the law are unique to New Zealand, it is one example of a different approach to a public health issue. We also believe that demand for synthetic cannabinoids and other NPS could decrease precipitously if people could get legal and regulated access to marijuana. In addition to alternative regulatory schemes we urge approaches that reduce harm and promote health, such as prevention education, drug checking, harm reduction education, and access to effective and affordable treatment.

We appreciate the difficulty of determining an appropriate response to NPS within the Commission’s mandate to set sentencing guidelines for illicit substances. However, we urge the Commission to seek and consult the best possible science before making determinations about how the specified NPS compounds may be addressed in the

Sentencing Guidelines. We also urge the Commission to consider the impact that these determinations will have both on research and on policymakers who must respond to the rapidly evolving nature of NPS.

Thank you for the opportunity to comment and do not hesitate to contact us for additional information.

Sincerely,



Grant Smith
Deputy Director, National Affairs
Drug Policy Alliance

¹ A full program of the *New Strategies for New Psychoactive Substances* event can be found here: http://www.drugpolicy.org/sites/default/files/documents/Psychoactive_NPS_Program.pdf and videos of the sessions are here: https://www.youtube.com/playlist?list=PLf6y9tNpg8wMugyNNxppsE_GPxBzXHM69.

² Bath Salts." Bath Salts. Accessed June 09, 2016. <http://www.aapcc.org/alerts/bath-salts/>.

³ "Monitoring the Future Study: Trends in Prevalence of Various Drugs." National Institute on Drug Abuse (NIDA). Accessed June 09, 2016. <https://www.drugabuse.gov/trends-statistics/monitoring-future/monitoring-future-study-trends-in-prevalence-various-drugs>.

⁴ "UR-144 (TCMP-018; KM-X1) and XLR11 (5-F-UR-144)." Drug Enforcement Administration, Office of Diversion Control: Drug & Chemical Evaluation Section. May 2013. Accessed June 9, 2016. http://www.deadiversion.usdoj.gov/drug_chem_info/spice/spice_ur144_xlr11.pdf.

⁵ "N-(1-amino-3-methyl-1-oxobutan-2-yl)-1-(cyclohexylmethyl)-1H-indazole-3-carboxamide (AB-CHMINACA), N-(1-amino-3-methyl-1-oxobutan-2-yl)-1-pentyl-1H-indazole-3-carboxamide (AB-PINACA) and [1-(5-fluoropentyl)-1H-indazol-3-yl](naphthalen-1-yl)methanone (THJ-2201): Background Information and Evaluation of 'Three Factor Analysis' (Factors 4, 5, and 6) for Temporary Scheduling " Drug Enforcement Administration, Office of Diversion Control: Drug & Chemical Evaluation Section. December 2014. Accessed June 9, 2016. <https://www.grassley.senate.gov/sites/default/files/news/upload/3-factor%20analysis%20AB-CHMINACA%20AB-PINACA%20THJ2201%2012172014.pdf>.

⁶ "AB-FUBINACA" Drug Enforcement Administration, Office of Diversion Control: Drug & Chemical Evaluation Section. April 2014. Accessed June 9, 2016. http://www.deadiversion.usdoj.gov/drug_chem_info/spice/ab_fubinaca.pdf.

⁷ Winstock, Adam R., and Monica J. Barratt. "Synthetic Cannabis: A Comparison of Patterns of Use and Effect Profile with Natural Cannabis in a Large Global Sample." *Drug and Alcohol Dependence* 131, no. 1-2 (2013): 106-11. doi:10.1016/j.drugalcdep.2012.12.011.

⁸ "Drug-Related Emergency Department Visits Involving Synthetic Cannabinoids." Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services. 2014. Accessed October 27, 2017. <https://www.samhsa.gov/data/sites/default/files/SR-1378/SR-1378.pdf>

⁹ "Overdose Death Rates." National Institute on Drug Abuse (NIDA). 2015. Accessed June 09, 2016. <https://www.drugabuse.gov/related-topics/trends-statistics/overdose-death-rates>; American Association of Poison Control Centers, Synthetic Cannabinoid Data, September 30, 2017, Accessed October 27, 2017. https://aapcc.s3.amazonaws.com/files/library/Syn_Marijuana_Web_Data_through_9.30.17.pdf

¹⁰ Walton, Alic G. "Why Synthetic Marijuana Is More Toxic To The Brain Than Pot." *Forbes*. August 28, 2014. Accessed June 09, 2016. <http://www.forbes.com/sites/alicegwalton/2014/08/28/6-reasons-synthetic-marijuana-spice-k2-is-so-toxic-to-the-brain/#1db656f849eb>.

¹¹ Griffiths, Paul, Roumen Sedefov, Ana Gallegos, and Dominique Lopez. "How Globalization and Market Innovation Challenge How We Think about and Respond to Drug Use: 'Spice' a Case Study." *Addiction* 105, no. 6 (2010): 951-53. doi:10.1111/j.1360-0443.2009.02874.x

¹² See legislative history of H.R.3537 - Dangerous Synthetic Drug Control Act of 2016, 114th Congress (2015-2016)

¹³ Aggarwal SK. Cannabinergic pain medicine: a concise clinical primer and survey of randomized-controlled trial results. *Clin J Pain* 2013;29(2):162-71

¹⁴ Whiting, P. F., Wolff, R. F., Deshpande, S., Di Nisio, M., Duffy, S., Hernandez, A. V., & Schmidkofer, S. (2015). Cannabinoids for medical use: a systematic review and meta- analysis. *Jama*, 313(24), 2456-2473.

¹⁵ B. Wilsey et al., "Low-dose vaporized cannabis significantly improves neuropathic pain," *J Pain* 14, no. 2 (2013); Igor Grant et al., "Medical marijuana: clearing away the smoke," *Open Neurology Journal* 6(2012); M. A. Ware et al., "Smoked cannabis for chronic neuropathic pain: a randomized controlled trial," *CMAJ* 182, no. 14 (2010); R. J. Ellis et al., "Smoked medicinal cannabis for neuropathic pain in HIV: a randomized, crossover clinical trial,"

¹⁶ Margaret Haney et al., "Dronabinol and marijuana in HIV-positive marijuana smokers: Caloric intake, mood, and sleep," *JAIDS Journal of Acquired Immune Deficiency Syndromes* 45, no. 5 (2007); Margaret Haney et al., "Dronabinol and marijuana in HIV+ marijuana smokers: acute effects on caloric intake and mood," *Psychopharmacology* 181, no. 1 (2005).

¹⁷ See Peter J. Davidson et al., "Witnessing Heroin-Related Overdoses: The Experiences of Young Injectors in San Francisco," *Addiction* 97, no. 12 (2002); S. E. Lankenau et al., "Injection Drug Users Trained by Overdose Prevention Programs: Responses to Witnessed Overdoses," *J Community Health* 38, no. 1 (2013); M. Tracy et al., "Circumstances of Witnessed Drug Overdose in New York City: Implications for Intervention," *Drug Alcohol Depend* 79, no. 2 (2005); K. C. Ochoa et al., "Overdosing among Young Injection Drug Users in San Francisco," *Addict Behav* 26, no. 3 (2001); Robin A. Pollini et al., "Response to Overdose among Injection Drug Users," *American journal of preventive medicine* 31, no. 3 (2006).

¹⁸ Samuel R. Friedman et al., "Drug Arrests and Injection Drug Deterrence," *American Journal of Public Health* 101, no. 2 (2011): 344-49; S. R. Friedman et al., "Relationships of Deterrence and Law Enforcement to Drug-Related Harms among Drug Injectors in Us Metropolitan Areas," *AIDS* 20, no. 1 (2006): 93-99; Corey S. Davis et al., "Effects of an Intensive Street-Level Police Intervention on Syringe Exchange Program Use in Philadelphia, Pa," *American Journal of Public Health* 95, no. 2 (2005): 233- 36; D. Wolfe, M. P. Carrieri, and D. Shepard, "Treatment and Care for Injecting Drug Users with Hiv Infection: A Review of Barriers and Ways Forward," *Lancet* 376, no. 9738 (2010): 355-66; E. Wood et al., "A Review of Barriers and Facilitators of Hiv Treatment among Injection Drug Users," *AIDS* 22, no. 11 (2008): 1247-56.

¹⁹ Federal Bureau of Investigation, "Crime in the United States, 2016," (Washington, DC: U.S. Department of Justice, 2017). The number of drug arrests first exceeded 1.5 million in 1996 – and it has almost never fallen below that point since.

²⁰ See, for example, National Research Council, *The Growth of Incarceration in the United States: Exploring Causes and Consequences* (Washington, D.C.: The National Academies Press, 2014).

²¹ Thomas Kerr, Will Small, and Evan Wood, "The Public Health and Social Impacts of Drug Market Enforcement: A Review of the Evidence," *International Journal of Drug Policy* 16, no. 4 (2005): 210- 20; S. A. Strathdee et al., "Hiv and Risk Environment for Injecting Drug Users: The Past, Present, and Future," *Lancet* 376, no. 9737 (2010). 268-284; Alex Stevens, "Applying Harm Reduction Principles to the Policing of Retail Drug Markets," (International Drug Policy Consortium, 2013); B. M. Mathers et al., "Hiv Prevention, Treatment, and Care Services for People Who Inject Drugs: A Systematic Review of Global, Regional, and National Coverage," *Lancet* 375, no. 9719 (2010); Global Commission on Drug Policy, "The War on Drugs and Hiv/Aids: How the Criminalization of Drug Use Fuels the Global Pandemic," (2012).