ISSUE BRIEF

DRUGS IN ADULT COURTS

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JUSTICE PROGRAMS OFFICE
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The National Drug Court Resource Center (NDCRC) is housed at the Justice Programs Office, a center in American University's School of Public Affairs, and is funded by the Bureau of Justice Assistance. Issue briefs, such as this, are created to educate and inform the treatment court field about topics of importance. For more information please visit the National Drug Court Resource Center at www.ndcrc.org.

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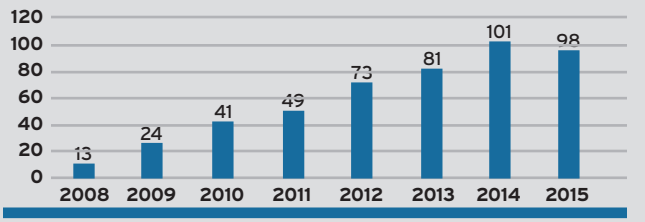
The Justice Programs Office, a center in American University's School of Public Affairs, supports the National Drug Court Resource Center, part of a BJA-funded drug court initiative. This issue brief was created to respond to significant issues identified during the provision of technical assistance to the field. For more information about accessing technical assistance services or to learn more about the AU Justice Programs Office, go to www.american.edu/justice.

INTRODUCTION

Over the last decade, the prevalence of synthetic and designer drugs has increased at alarming rates. The European Monitoring Centre for Drugs and Addiction identified thirteen new psychoactive substances (NPSs) in 2008 and ninety-eight NPSs in 2015, a 653 percent increase in only seven years.[1] A total of 480 NPSs were identified during that time frame.

This surge in availability, along with reported increases in use, difficulties associated with detection of emerging synthetic and designer drugs, and a murky legal landscape create myriad challenges for drug court practitioners and substance abuse treatment organizations.

Number of New Psychoactive Substances By Year



Source: European Monitoring Centre for Drugs and Drug Addiction

LEGAL STATUS

Currently, there are two laws that specifically address synthetic or designer drugs:

1) The Federal Analogue Act (21 U.S.C. § 813)

2) The Synthetic Drug Abuse Prevention Act (21 U.S.C.812(c))

The Federal Analogue Act was passed by Congress in 1986. The bill amended the Controlled Substances Act (21U.S.C. §801 et. Seq) so that synthetic or designer drugs that are "substantially similar" to drugs already on Schedule I or II are treated the same as those controlled substances.[2]

The Synthetic Drug Abuse Prevention Act was passed by Congress in 2012. It added "cannabimimetic agents" to Schedule I of the Controlled Substances Act, as well as fifteen specific cannabinoid compounds and eleven synthetic stimulants and hallucinogens.[3]

In addition to these laws, the United States Attorney General (AG) possesses the authority to temporarily list a substance under Schedule I if such an action is "necessary to avoid an imminent hazard to the public health."[4] Of the thirty-seven times this authority has been asserted by the AG, thirty-two have been within the last five years.[5]

Despite these laws and actions, sellers and users of synthetic drugs have been able to advertise these drugs as "legal highs" because of language in Section 203 of the Federal Analogue Act. It states that "a controlled substance analogue shall, to the extent intended for human consumption, be treated, for purposes of this title and title III as a controlled substance in schedule I."[6] Packages of synthetic cannabinoids, bath salts, and other synthetic drugs will often have warnings on them that state "Not Intended for Human Consumption" as a way to exploit this language.

Synthetic Drugs

Substances wherein the psychoactive properties of a scheduled drug have been retained, but the molecular structure has been altered in order to avoid prosecution under the Controlled Substances Act.

D.E. Smith and R.B. Seymour, 1985

FORM AND MODES OF ADMINISTRATION

Synthetic cannabinoids are man-made chemicals that are functionally similar to Δ9-tetrahydrocannabinol (THC), the psychoactive constituent found in cannabis. These chemicals are either sprayed on dry plant materials for users to smoke or sold as liquids for vaporizing in e-cigarette devices.

Synthetic cathinones, also known as "bath salts," are a class of drugs that are chemically related to the *khat* plant found in Southern Arabia and East Africa. They usually take the form of white or brown crystal-like powder that can be snorted, ingested, smoked or injected.[7] Similarly, non-pharmaceutical fentanyl, a potent opioid, comes in powder or tablet form, that users can snort, ingest, or inject.[8]

Kratom comes from the plant *Mitragyna speciosa* Korth. Kratom users chew the leaves or gum infused with kratom or brew dried kratom leaves or powder in a tea.[9] Kratom is not a synthetic drug, but due to increased use and awareness of kratom in the U.S. researchers have used the label "designer drug," which is why it is included here.

INCIDENCE OF USE

To better understand populations that are at risk for synthetic drug use, researchers have surveyed a variety of groups during the last several years.

In general, these surveys show that synthetic cannabinoids are the most widely abused synthetic drug. The Monitoring the Future Survey, for instance, found that ten percent of high school seniors reported using synthetic cannabinoids in the previous year, compared to 1.1 percent of high school seniors who reported using synthetic cathinones in the previous year.[10]

Use rates fluctuate depending on the population being surveyed however; and survey literature does not suggest that synthetic or designer drugs are "drugs of choice" for most users. Below is a sampling of studies on synthetic drug use:

- A survey of current cannabis users by Gunderson, et al. found that twenty-four percent of respondents reported currently using synthetic cannabinoids.[11] This suggests that current cannabis users are more likely to be using synthetic cannabinoids.
- Wagner et al. found that seven percent of injection drug users reported using synthetic cathinones.[12]
- Caban et al. surveyed 155 army patients at Fort Bragg, North Carolina, who admitted or were suspected of using an illegal substance. Tests revealed that 7.7 percent had recently used spice.[13]

Two studies of synthetic cannabinoid use have specifically surveyed criminal justice populations: The Community Drug Early Warning System (CDEWS) Pilot Project in 2013, and a CDEWS replication study conducted two years later.

In both studies, researchers tested urine samples that were previously tested using a standard drug testing panel with an expanded drug panel. The results suggest that synthetic cannabinoid use is relatively frequent. In the pilot project study, they found that thirty-nine percent of urine specimens from parolees and probationers in Washington, DC, whose standard drug test was negative tested positive for synthetic cannabinoids.[14] The expanded sample used in the replication study produced similar results, finding that thirty-six percent

of parolee and probationer urine samples who tested negative under a standard panel tested positive for synthetic cannabinoids.[15]

The replication study also obtained urine specimens from an adult drug court in Denver, Colorado, and found that three percent of specimens who tested negative under the standard panel tested positive for synthetic cannabinoids.[16]

What factors influence the decision to use synthetic drugs? No doubt the costs, increased availability, and legal ambiguity play a role.[17] But surveys have also found that many people use synthetic drugs to specifically avoid detection. Bonar, Ashrafioun, and Ilgen found that seventy-one percent of patents in residential treatment facility used synthetic cannabinoids to "get high without having a positive drug test."[18] Another survey (Vandery et al.) of people who reported using spice at least once in their life found that thirty percent endorsed using spice products to "achieve intoxication while avoiding detection in drug urinalysis testing."[19]

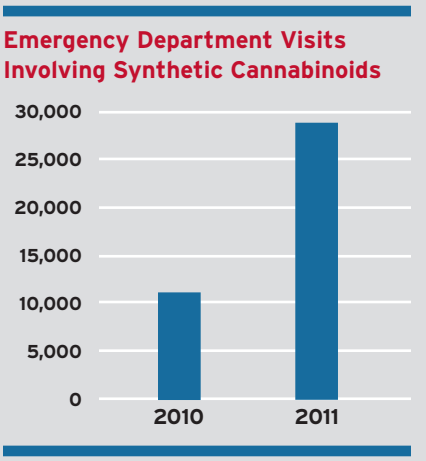
EFFECTS AND HEALTH IMPACTS

The short-and-medium term effects of using synthetic cannabinoids, bath salts, fentanyl, and kratom manifest in a variety of ways that drug court programs should be on the lookout for:

Synthetic cannabinoids: Use of synthetic cannabinoids may have similar effects as cannabis use, although the effects are less predictable.[20] Users can exhibit sedation, paranoia, anxiety, confusion, and delusions.[21]

Bath salts: These drugs produce effects akin to methamphetamine use, such as hyperactivity, euphoria, anxiety, confusion, suicidal thoughts, and weight loss.[22]

Kratom: The exact effects of kratom use on the behavior and health of humans are not fully known at this time,[23] although some research suggests that low doses produce stimulant-like effects, while high doses can mimic the effects of opioids.[24]



Source: Drug Abuse Warning Network.

WHAT CAN DRUG COURTS DO?

Communicate with law enforcement, emergency departments, and treatment facilities. They may be able to share information on what synthetic and designer drugs are most commonly used in the area, or specific drugs that are emerging. Drug courts may also consider scouting local head shops to see what drugs are being sold.

Include language in manuals and contracts that explicitly mentions synthetic drugs. Contracts and manuals should give participants a clear understanding of what constitutes a prohibited substance, including any illicit synthetic or designer drugs. Beyond mentioning these drugs specifically, drug courts may want to include language that prohibits the use, possession, or distribution of drugs that are marked "Not for Human Consumption."[25]

Maintain best practices for drug testing protocol. The National Association of Drug Court Professionals suggests:[26]

- Drug testing procedures should be clearly articulated in participant contracts.
- Urine specimen collection should be witnessed.
- Testing should be frequent, random, and test for possible dilution or adulteration.
- Results should be available within forty-eight hours of sample collection.

Conduct drug tests with extended panels. Some companies are beginning to release expanded panel tests, but the costs are often much higher. Prices for confirmation of synthetic cannabinoids and bath salts can range from $15 to $40 per unit.[27] Drug courts may be able to cover some of these costs through reimbursements from Medicare. The current Clinical Laboratory Fee Schedule (CLFS) includes synthetic cannabinoids, opiate analogues, and synthetic stimulants under applicable drug classes.[28]

Drug courts should be aware of the limitations of these extended drug panel tests however. Current tests only detect a small handful of synthetic cannabinoid metabolites, standardized cutoff limits have yet to be established, the methods of these tests vary, and there is some uncertainty about windows of detection for newer synthetic or designer drugs.[29]

Develop sanctions that specifically address synthetic drug use. Due to the fact that synthetic drugs are often used to avoid detection in standard drug tests (Perone et al.),[30] drug courts should consider sanctions that address two behaviors: the use of the synthetic drug in question and the potential effort to deceive the court.[31]

Utilize random searches and seizures. Before using this strategy, drug courts should make sure they understand all applicable laws related to search and seizure, probationary conditions, and parties authorized to perform a search.

Synthetic and designer drugs are often sold online (Fattore & Fratta;[32] Hillebrand, Olszewski & Sedefov;[33] Curtis et al.;[34] Meyers et al.[35]), so drug courts may want to consider searching internet cache history, online receipts, and ATM transactions in addition to traditional search areas.

Provide effective treatment services. While there is no standard protocol currently available for synthetic or designer drug use treatment, current literature suggests treatment should use components similar to those of other types of addiction treatment, including medication assisted treatment (MAT)[36] and individual and group therapy with cognitive behavioral therapy.[37]

ENDNOTES

[1]European Monitoring Centre for Drugs and Drug Addiction, Publications Office of the European Union, "EMCDDA–Europol 2015 Annual Report on the implementation of Council Decision 2005/387/JHA, Implementation reports," (2016).

[2]United States Government Publishing Office, United States Code, Section 813 (B). "Treatment of Controlled Substance Analogues," (2010).

[3]United States Congress, Public Law, "Subtitle D of Title XI of the Food and Drug Administration Safety and Innovation Act," (2012).

[4]United States Government Publishing Office, United States Code, Food and Drugs Section 811 (B)(d)(C)(i). "Authority and Criteria for Classification of Substances," (2006).

[5]Sacco, Lisa N., and Kristin M. Finklea. "Synthetic drugs: Overview and Issues for Congress." *Journal of Drug Addiction, Education, and Eradication*, no. 8 (2016): 197.

[6]21 U.S.C. § 802 (32)(B)(iv)

United States Government Controlled Substances Act Chapter (32)(b)(iv) https://www.law.cornell.edu/uscode/text/21/802.

[7]"Bath Salts," NIDA, Drug Facts – Synthetic Cathinones https://www.drugabuse.gov/publications/drugfacts/syntheticcathinones-bath-salts.

[8]NIDA, Drug Facts – Fentanyl https://www.drugabuse.gov/ publications/drugfacts/fentanyl#references.

[9]Singh, Darshan, Christian P. Müller, Balasingam K. Vicknasingam, "Kratom (Mitragyna speciosa) dependence, withdrawal symptoms and craving in regular users." *Drug and Alcohol Dependence,* no. 139 (June 2014):132-137. https://doi.org/10.1016/j.drugalcdep.2014.03.017.

[10]Miech, Richard. A., Lloyd D. Johnston, Patrick M. O'Malley, Jerald G. Bachman, & John E. Schulenberg, (2015). Monitoring the Future National Survey Results on Drug Use, 1975–2014.

[11]Gunderson, Erik W., Heather M. Haughey, Nassima Ait-Daoud, Amruta S. Joshi, and Carl L. Hart. "A Survey of Synthetic Cannabinoid Consumption by Current Cannabis Users." *Substance Abuse* 35, no. 2 (2014): 184-89. doi:10.1080/08897077.2013.846288.

[12]Wagner, Karla D., Richard F. Armenta, Alexis M. Roth, Jane C. Maxwell, Jazmine Cuevas-Mota, and Richard S. Garfein. "Use of Synthetic Cathinones and Cannabimimetics among Injection Drug Users in San Diego, California." *Drug and Alcohol Dependence* 141 (2014): 99-106. doi:10.1016/j.drugalcdep.2014.05.007.

[13]Berry-Cabán, Cristóbal S., P.E. Kleinschmidt, D.S. Rao, and J. Jenkins. "Synthetic Cannabinoid and Cathinone Use Among US Soldiers." US Army Med Dep J: 19-24. NCBI. https://www.thefreelibrary.com/Synthetic+cannabinoid+and+cathinone+use+among+us+soldiers.-a0309980590.

[14]Wish, Eric D., Amy Billing, and Eleanor Erin Artigiani. *"Community Drug Early Warning System: The CDEWS-2 Replication Study."* Office of National Drug Control Policy. Washington, DC: Executive Office of the President, (2016): 9.

[15]*Ibid*.

[16]Cottencin, Olivier, Benjamin Rolland, and Laurent Karila. "New Designer Drugs (Synthetic Cannabinoids and Synthetic Cathinones): Review of Literature." *Current Pharmaceutical Design* 20, no. 25 (2014): 4106-111. doi:10.2174/13816128113199990622.

[17]Bonar, Erin E., Lisham Ashrafioun, and Mark A. Ilgen. "Synthetic Cannabinoid Use Among Patients in Residential Substance Use Disorder Treatment: Prevalence, Motives, and Correlates." *Drug and Alcohol Dependence* 143 (2014): 268-71. doi:10.1016/j.drugalcdep.2014.07.009.

[18]Vandrey, Ryan, Kelly E. Dunn, Jeannie A. Fry, and Elizabeth R. Girling. "A Survey Study to Characterize Use of Spice Products (synthetic Cannabinoids)." *Drug and Alcohol Dependence* 120, no. 1-3 (2012): 238-41. doi:10.1016/j.drugalcdep.2011.07.011.

[19]Hensley, Scott. "New York Bans 'Synthetic Marijuana'." NPR. March 30, 2012.

[20]Gunderson, Erik W., Heather M. Haughey, Nassima Ait-Daoud, Amruta S. Joshi, and Carl L. Hart. "Spice" and "K2" Herbal Highs: A Case Series and Systematic Review of the Clinical Effects and Biopsychosocial Implications of Synthetic Cannabinoid Use in Humans." *The American Journal on Addictions* 21, no. 4 (2012): 320-26. doi:10.1111/j.1521-0391.2012.00240.x.

[21]Miotto, Karen, Joan Striebel, Arthur K. Cho, and Christine Wang. "Clinical and Pharmacological Aspects of Bath Salt Use: A Review of the Literature and Case Reports." *Drug and Alcohol Dependence* 132, no. 1-2 (2013): 1-12. doi:10.1016/j.drugalcdep.2013.06.016.

[22]Hassan, Zurina, Mustapha Muzaimi, Visweswaran Navaratnam, Nurul H.m. Yusoff, Farah W. Suhaimi, Rajakumar Vadivelu, Balasingam K. Vicknasingam, Davide Amato, Stephan Von Hörsten, Nurul I.w. Ismail, Nanthini Jayabalan, Ammar I. Hazim, Sharif M. Mansor, and Christian P. Müller. "From Kratom to Mitragynine and Its Derivatives: Physiological and Behavioural Effects Related to Use, Abuse, and Addiction." *Neuroscience & Biobehavioral Reviews* 37, no. 2 (2013): 138-51. doi:10.1016/j.neubiorev.2012.11.012.

[23]Warner, Marcus L., Nellie C. Kaufman, and Oliver Grundmann. "The Pharmacology and Toxicology of Kratom: From Traditional Herb to Drug of Abuse." *International Journal of Legal Medicine* 130, no. 1 (2015): 127-38. doi:10.1007/s00414-015-1279-y.

[24]National Association of Drug Court Professionals: *Adult Drug Court Best Practice Standards* 5, no. 1 (2005) (http:// www.ndcrc.org/sites/default/files/adult_drug_court_best_practice_standards_volume_ii_0.pdf).

[25]West Virginia Purchasing Division, CRFQ 0621).

[26]Centers for Medicare and Medicaid Services, "Calendar Year (CY) 2016 Clinical Laboratory Fee Schedule (CLFS) Final Determination," (2016).

[27]Ammann, Julia, Olaf H. Drummer, Dimitri Gerostamoulos, and Jochen Beyer. "Detection of Synthetic Cannabinoids in Biological Samples -A Review." *TIAFT Bulletin* 41, no. 3 (2011): 21-27.

[28]Perrone, Dina, Randi D. Helgesen, and Ryan G. Fischer. "United States Drug Prohibition and Legal Highs: How Drug Testing May Lead Cannabis Users to Spice." *Drugs: Education, Prevention, and Policy*20, no. 3 (2012): 216-24. doi:10.3109/09687637.2012.749392.

[29]Fattore, Liana, and Walter Fratta. "Beyond THC: The New Generation of Cannabinoid Designer Drugs." *Frontiers in Behavioral Neuroscience* 5 (2011). doi:10.3389/fnbeh.2011.00060.

[30]Hillebrand, Jennifer, Deborah Olszewski, and Roumen Sedefov. "Legal Highs on the Internet." *Substance Use & Misuse* 45, no. 3 (2010): 330-40. doi:10.3109/10826080903443628.

[31]Curtis, Brenda, Kelly Alanis-Hirsch, Övgü Kaynak, John Cacciola, Kathy Meyers, and Anthony Thomas Mclellan. "Using Web Searches to Track Interest in Synthetic Cannabinoids (aka 'Herbal Incense')." *Drug and Alcohol Review* 34, no. 1 (2014): 105-08. doi:10.1111/dar.12189.

[32]Meyers, Kathleen, Övgü Kaynak, Elena Bresani, Brenda Curtis, Ashley McNamara, Kristine Brownfield, and Kimberly C. Kirby. "The Availability and Depiction of Synthetic Cathinones (Bath Salts) on the Internet: Do Online Suppliers Employ Features to Maximize Purchases?" *International Journal of Drug Policy* 26, no. 7 (2015): 670-74. doi:10.1016/j.drugpo.2015.01.012.

[33]Mas-Morey, P., M. H. M. Visser, L. Winkelmolen, and D. J. Touw. "Clinical Toxicology and Management of Intoxications with Synthetic Cathinones ("Bath Salts")." *Journal of Pharmacy Practice* 26, no. 4 (2012): 353-57. doi:10.1177/0897190012465949.

[34]Weaver, Michael F., John A. Hopper, and Erik W. Gunderson. "Designer Drugs 2015: Assessment and Management." *Addiction Science & Clinical Practice* 10, no. 1 (2015). doi:10.1186/s13722-015-0024-7.

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