



DISTRICT OF COLUMBIA

STATISTICAL ANALYSIS CENTER

SPRING 2016

BRIEF: NEW PSYCHOACTIVE SUBSTANCES

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DEFINITION

New Psychoactive Substances (NPS), also commonly known as Synthetic Drugs, are a category of psychoactive substances that have become increasingly available and are intended to mimic the effects of legal and illegal drugs.¹ While the first NPS were identified in 2008 by the U.S. Customs and Border Patrol, the number of newly identified substances has continued to increase each year.² Estimates revealed that as of December 2015, over 600 unique substances have been identified.³

NPS are often marketed as herbal incense, potpourri, bath salts, jewelry cleaner, or plant food and can be purchased online, in stores, or on the streets. Often intentionally labeled as not for human consumption

or marketed as legal alternatives to illegal drugs, NPS are frequently mixed with multiple toxic chemicals and synthetic compounds. Despite the dangers, NPS appeal to some users based on their low cost, ease of purchase, high potency and the ability to avoid detection in many drug tests. Most NPS are manufactured in unregulated factories in Asia, with the biggest producers located in China and India.⁴ In an effort to avoid regulation, their chemical compounds are frequently changed as known substances are scheduled. The changing of chemical compounds makes testing challenging and the effects of each substance unpredictable.



¹ National Institute on Drug Abuse. Synthetic Cannabinoids Retrieved from <https://www.drugabuse.gov/publications/drugfacts/synthetic-cannabinoids>
² Office of National Drug Control Policy, Synthetic Drugs Fact Sheet, https://www.whitehouse.gov/sites/default/files/ondcp/Fact_Sheets/synthetic_drugs_fact_sheet_12-6-12.pdf
³ United Nations Office on Drugs and Crime Early Warning Advisory on NPS, 2015 www.unodc.org/LSS/Page/NPS
⁴ United Nations Office on Drugs, The World Drug Report 2013 https://www.unodc.org/unodc/secured/wdr/wdr2013/World_Drug_Report_2013.pdf

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TYOLOGY

Synthetic cannabinoids

Synthetic cannabinoids refer to a growing number of man-made mind-altering chemicals that are designed to mimic chemicals found in the marijuana plant. This category of NPS are sprayed on dried plant material so they can be smoked or sold as liquids to be vaporized and inhaled in e-cigarettes and other devices. These products are sold in colorful packages with names like K-2, Bizarro, and Scooby Snax. The health effects include agitation, elevated heart rate and blood pressure, tremors, seizures, and hallucinations.⁵ The long term effects of synthetic cannabinoids are unknown.

Synthetic cathinones

Synthetic cathinones, commonly known as bath salts, are chemically related to the khat plant - a shrub that grows in East Africa and the Southern Arabian Peninsula. Synthetic cathinones are stimulants and most commonly resemble white or brown crystal-like powder that is swallowed, snorted, smoked, or injected.⁶ These substances are often sold as plant food or jewelry cleaner with brand names such as Flakka, Cloud Nine, White Lightning and Scarface. Synthetic cathinone use is associated with increased heart rate and blood pressure, extreme paranoia, hallucinations, violent behavior, overdose and death. The long term effects of synthetic cathinones are unknown.

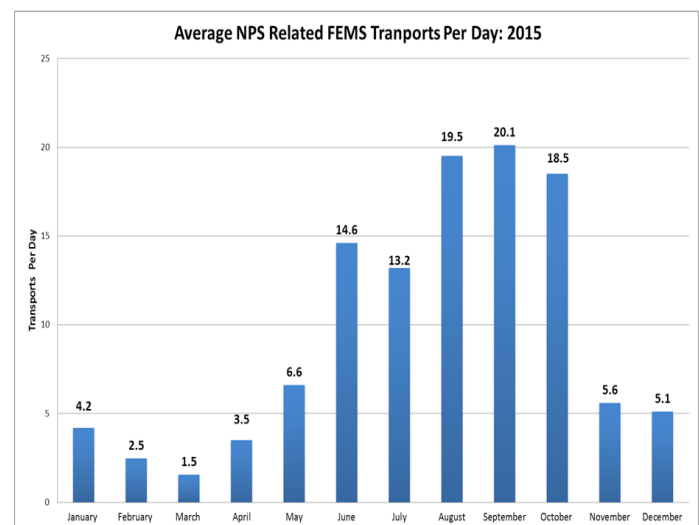
Synthetic hallucinogens

Synthetic hallucinogens are substances that are designed to mimic hallucinogens like LSD and PCP. Synthetic hallucinogens are sold as powder, crystals, pills, or on blotter paper, and are taken orally, rectally, or snorted.⁷ Two popular synthetic hallucinogens are N'Bomb and Smiles. Adverse health effects of synthetic hallucinogen use include increased heart rate and blood pressure, paranoia, psychosis, seizures, overdose, and death. Long term effects include persistent psychosis and flashbacks.⁸

⁵ Id.
⁶ National Institute on Drug Abuse. Synthetic Cathinones ("Bath Salts") Retrieved from <https://www.drugabuse.gov/publications/drugfacts/synthetic-cathinones-bath-salts>
⁷ Schedules of Controlled Substances: Temporary Placement of Three Synthetic Phenethylamines Into Schedule I http://www.deadiversion.usdoj.gov/fed_regs/rules/2013/fr1115.htm
⁸ Brauser, D. (2014) New Deadly Class of Synthetic Hallucinogens Mimics LSD. Medscape. http://www.medscape.com/viewarticle/836297#vp_1

2015 NPS USE IN THE DISTRICT OF COLUMBIA

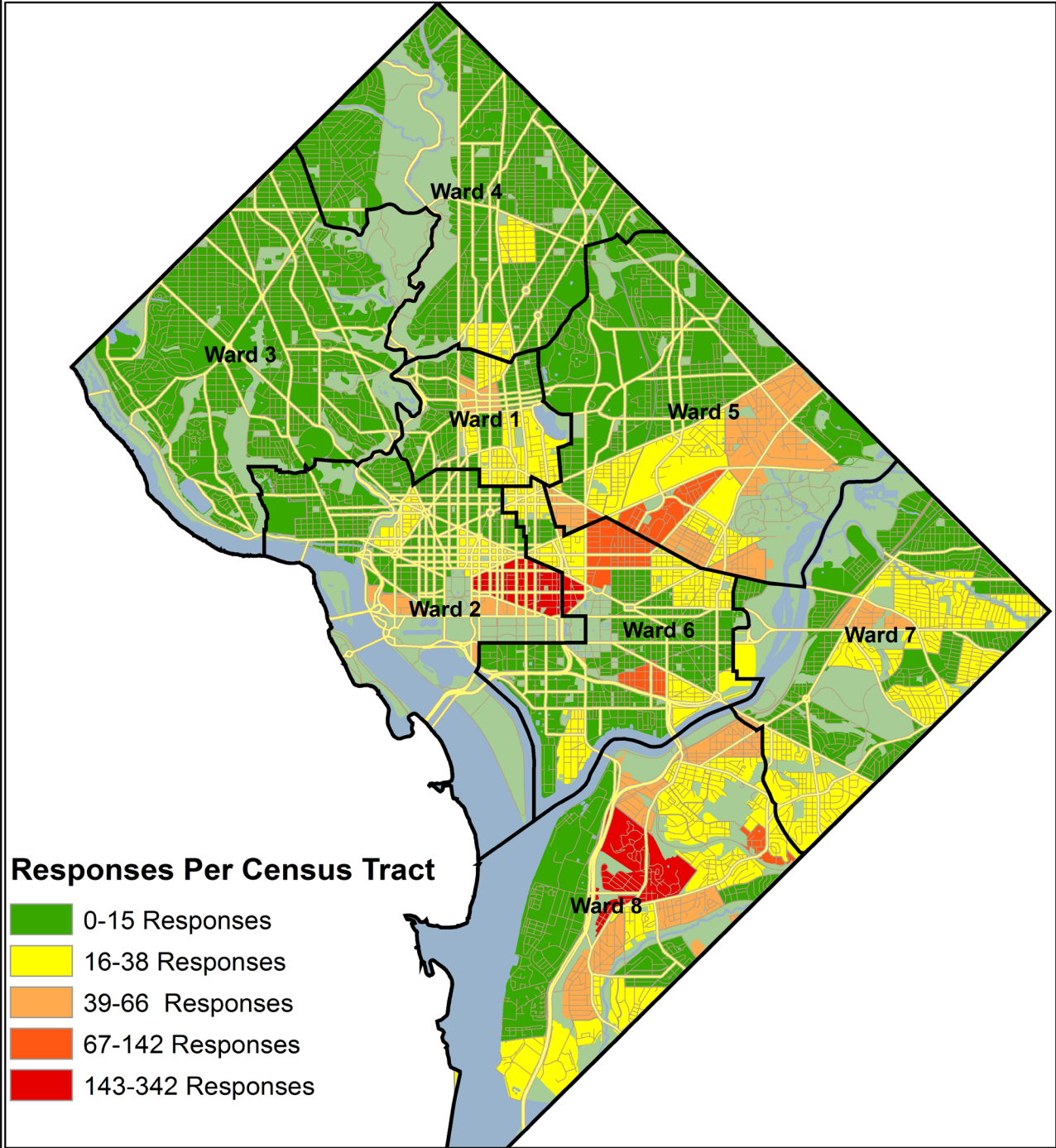
While the prevalence of NPS use in the District of Columbia (District) is not yet fully understood, data from the District's Fire and Emergency Medical Services Department (FEMS) indicate that 2015 was a demanding year for FEMS responses and transports related to suspected synthetic cannabinoid use. In 2015, FEMS responded to at least 3,884 calls for service and provided at least 3,510 transports to local hospitals for individuals who disclosed or were suspected of using NPS.⁹



Over the course of the year, FEMS averaged more than 9 NPS related transports per day with a high of 20 per day during the month of September.¹⁰ FEMS data on responses show that 81% of the calls for service were for men and the average age of those requiring a FEMS response was 38 years old. With respect to geography, Wards 2, 5, 6, and 8 required the most responses, with the highest number of responses seen in the neighborhoods clusters of Penn Quarter/Chinatown/Judiciary Square,¹¹ St. Elizabeth's/North Congress Heights,¹² NoMA/Sursum Corda/Atlas District and Gallaudet/Ivy City.¹³ The following map shows the number of FEMS responses mapped by census tract.¹⁴


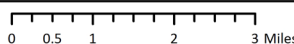
⁹ FEMS calls for service and responses for NPS are determined based on client disclosures to FEMS staff.
¹⁰ NPS related totals and averages are based on client disclosures to FEMS staff.
¹¹ Census Tracts: 005800 & 005900
¹² Census Tract: 010400
¹³ Census Tracts: 010600 & 008803
¹⁴ This map has joined FEMS response location data with census tracts. Census tracts are defined as small, relatively permanent statistical subdivisions of a county or equivalent entity; census tract boundaries generally follow visible and identifiable features and are defined by the U.S. Census Bureau. This map is part of a larger story map entitled New Psychoactive Substances: 2015 Use Across the District <http://arcg.is/10LcIh>

2015 FEMS Responses Related to Suspected NPS Use



Responses Per Census Tract

- 0-15 Responses
- 16-38 Responses
- 39-66 Responses
- 67-142 Responses
- 143-342 Responses

	1 inch = 1.972854 miles	Data Source: DC Fire & Emergency Management Services Prepared by: DC CJCC	Coordinate System: NAD 1983 StatePlane Maryland FIPS 1900
	Scale: 1:125,000		This data visualization has joined FEMS data with census tracts, these tract areas are roughly equivalent to a neighborhood.
		Date: 4/5/2016	

FEDERAL NPS EFFORTS

To date, the federal government's efforts to curb the use and sale of NPS have focused on education, research, prevention, and disrupting the manufacturing and distribution of NPS. The Office of National Drug Control Policy (ONDCP) has spearheaded efforts to educate local and national stakeholders as well as integrate NPS into the White House's National Drug Control Strategy. Scheduling efforts have been led by both the Drug Enforcement Agency (DEA) and The Food and Drug Administration (FDA).¹⁵ As of March 31, 2016 the FDA and DEA have scheduled 19 new cannabinoids and cathinones, with another 21 temporarily scheduled and awaiting a final scheduling determination.¹⁶

With respect to interdiction, efforts have been undertaken by numerous federal agencies including the DEA, the U.S. Immigration and Customs Enforcement, The Department of Homeland Security and U.S. Customs and Border Protection. In an effort to slow the importation of NPS from Asia, diplomatic efforts have led the China Ministry of Public Security, Narcotics Control Bureau to control an additional 116 NPS. This regulation, which took effect on October 1, 2015 not only controls new chemical compounds but criminalizes numerous activities related to the manufacturing and transportation NPS.¹⁷

LOCAL NPS EFFORTS

The District's response to NPS is based on partnerships and collaboration between elected officials, public health agencies, and local and federal law enforcement agencies. The District has identified four target areas for curbing the use and sale of NPS: 1) legislation/enforcement; 2) drug testing; 3) education/prevention; and 4) information sharing. The data compiled from drug testing and FEMS transports indicate that synthetic cannabinoids are the primary NPS used in the District. Accordingly, the emphasis over the past three years has been on targeting synthetic cannabinoids.

¹⁵ Drugs, substances, and certain chemicals used to make drugs are classified into five (5) distinct categories or schedules depending upon the drug's acceptable medical use and the drug's abuse or dependency potential. More information on scheduling can be found on the DEA's website <http://www.dea.gov/druginfo/ds.shtml>

¹⁶ Drug Enforcement Agency Data Submission - 4/4/2015

¹⁷ 2016 International Narcotics Control Strategy Report (INCSR) <http://www.state.gov/j/inl/rls/nrcrpt/2016/vol1/253251.htm>

Enforcement/Legislation

In an effort to regulate NPS, the District passed the Criminal Code Amendments Act of 2012, which added new synthetic cannabinoids to the District's controlled substances schedule. In 2014 and early 2015, the District's Department of Consumer and Regulatory Affairs (DCRA) adopted emergency regulations that allowed them to administer fines and recommend revocation of business licenses for stores selling substances consistent with those identified on the controlled substances list.

In July of 2015, these emergency regulations were enacted into law with the passing of the Sale of Synthetic Drugs Emergency Amendment Act of 2015.¹⁸ This legislation enables DCRA, the District's Office of the Attorney General (OAG) and the Metropolitan Police Department (MPD) to sanction businesses, revoke business licenses and, as appropriate, close stores across the District.¹⁹ In November 2015, the OAG, in collaboration with the Department of Forensic Sciences, introduced the Synthetics Abatement and Full Enforcement Drug Control Act of 2015 ("SAFE DC").²⁰ This legislation, which was unanimously passed by the District of Columbia Council in April of 2016, was designed to strengthen the District's ability to test NPS chemical compounds and prosecute cases against sellers and distributors of synthetic cannabinoids and synthetic cathinones.

Drug Testing

As a result of participating in the Center for Substance Abuse Research (CESAR) Community Drug Early Warning System (CDEWS) pilot project in 2013 and 2015, the Pretrial Services Agency for the District of Columbia (PSA) partnered with the Office of the Chief Medical Examiner (OCME) to research and develop methods for analyzing and testing for synthetic cannabinoids. In September 2015, PSA and the Court Services and Offender Supervision Agency (CSOSA) began testing for synthetic cannabinoids as part of their regular drug screening. During the final quarter of 2015, drug testing at PSA and CSOSA revealed 513 (95 tests at PSA and 418 tests at CSOSA) drug screens testing positive for synthetic cannabinoids.²¹

¹⁸ Sale of Synthetic Drugs Emergency Amendment Act of 2015 <http://lims.dccouncil.us/Download/34097/B21-0259-Enrollment.pdf>

¹⁹ DCRA, OAG and MPD Data Submissions

²⁰ Synthetics Abatement and Full Enforcement Drug Control Act of 2015 ("SAFE DC") <http://lims.dccouncil.us/Download/34888/B21-0485-Introduction.pdf>

²¹ PSA and CSOSA Data Submissions

In 2015, prompted by a spike in emergency transports, the District's Department of Health (DOH) implemented an emergency ruling requiring hospitals to collect urine or blood specimens for patients treated for suspected NPS use in emergency rooms and hospitals. The samples are tested for the presence of NPS by the Office of the Chief Medical Examiner; results have shown that approximately 58% of all samples tested positive for either synthetic cannabinoids alone or in combination with other scheduled substances.²²

Education/Prevention

In response to the proliferation of NPS and synthetic cannabinoids in specific, the District launched prevention and education campaigns in 2013 and 2014 aimed at reaching youth and the store owners who were often part of distribution networks. In 2013 the District's Department of Behavioral Health (DBH) launched the District's "K-2 Zombie" campaign. This award-winning public health and education campaign was designed to raise awareness of the dangers of synthetic cannabinoid use among 12 to 16 year-olds. In 2014, the DCRA launched the "Right Choice" campaign which sought to educate store owners about the dangers of NPS and ensure they understood the legality of the products.

Information Sharing

In 2013, the District's Criminal Justice Coordinating Council (CJCC) Substance Abuse Treatment and Mental Health Services Integration Taskforce (SATMHSIT) convened a "Synthetic Drugs: Myths, Facts, and Strategies" symposium that brought together law enforcement, criminal justice, health and human services, and business leaders to raise awareness about the proliferation of synthetic drug use in the District of Columbia. As a direct outcome of the symposium, the CJCC established a Synthetic Drugs (now New Psychoactive Substances) Workgroup, comprised of local and federal representatives from across the justice, public health, behavioral health, and education fields. In 2014, the CJCC held a follow-up synthetic drugs symposium during which subject matter experts described innovative approaches being taken nationally and locally to address synthetic drug use; the symposium also served as an opportunity to continue the dialogue on local response strategies.

²² OCME Data Submission

The priority areas for the CJCC NPS workgroup are coordination and sharing of information, improving NPS detection (testing), and legislation. The workgroup evaluates current policies and legislative options, sponsors educational forums for the public and professionals to learn about NPS, and maintains a website where partner agencies have access to the latest information regarding NPS. In September 2015, the CJCC in partnership with the Maryland Governor's Office of Crime Control and Prevention and Virginia's Department of Criminal Justice Services convened a regional symposium on NPS to examine coordinated approaches that balance the public health and safety concerns related to synthetic drug use through the Washington Metropolitan region. One of the next steps that emerged from the summit was to engage partner agencies from Maryland and Virginia in the CJCC NPS workgroup. The first meeting including regional partners was held in May of 2016 which resulted in a collective commitment to enhanced information sharing.

THE DC SAC

The Statistical Analysis Center for the District of Columbia (DC SAC), the research arm of the CJCC, was established in 2001 by a Mayoral Executive Order to provide a division dedicated to the collection, analysis, and dissemination of criminal justice system information. The work of the DC SAC is guided by the Interagency Research Advisory Committee (IRAC), which consists of researchers and program representatives from justice system agencies. The IRAC serves as the advisory body for the DC SAC and supports its efforts to collect, analyze, and disseminate relevant research and analysis that can impact the District's adult and juvenile justice systems. The DC SAC strives to provide decision-makers and the public at large with an easily accessible and fact-based report on crime and the administration of justice across the District of Columbia.

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