Demanding More Vigilance
Synthetic Drugs in the District of Columbia, Maryland, and Virginia

Wednesday, September 16, 2015
Kellogg Conference Center at Gallaudet University

A regional symposium presented by the Criminal Justice Coordinating Council’s Substance Abuse Treatment and Mental Health Services Integration Taskforce in partnership with the Maryland Governor’s Office of Crime Control and Prevention and the Virginia Department of Criminal Justice Services.
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October 29, 2015

Dear Symposium Attendees:

The Criminal Justice Coordinating Council (CJCC) for the District of Columbia’s Substance Abuse Treatment and Mental Health Services Integration Taskforce (SATMHSIT), in partnership with the Maryland Governor’s Office of Crime Control and Prevention and the Virginia Department of Criminal Justice Services, was pleased to present *Demanding More Vigilance: Synthetic Drugs in the District of Columbia, Maryland, and Virginia*, a regional symposium designed to bring behavioral health, medical, scientific, legislative, criminal justice, and education leaders together to examine the current landscape of synthetic drugs in the District of Columbia, Maryland, and Virginia.

CJCC wishes to extend thanks to the subject matter experts who presented the innovative approaches under way nationally, regionally, and locally to address this issue; reported on the successes and challenges experienced as we address this issue; and enriched the dialogue on regional response strategies. And thank you, the attendees, who helped to make this symposium not only informative, but also interactive.

SATMHSIT was convened to improve the treatment options available to District residents who are involved in the criminal justice system with mental illness, substance abuse disorders, and co-occurring disorders. One of SATMHSIT’s strategic priorities is to facilitate cross-system educational opportunities between the criminal justice and behavioral health systems.

We hope that, beyond providing new information about the impact and prevalence of synthetic drug use in our communities, the symposium will propel our regional efforts to continue moving forward toward a comprehensive and coordinated approach that addresses the public health and public safety concerns related to synthetic drug use in throughout the District of Columbia, Maryland, and Virginia.

Sincerely,

Mahnone A. Butler
Executive Director
Agenda
The Criminal Justice Coordinating Council for the District of Columbia’s Substance Abuse Treatment and Mental Health Services Integration Taskforce (SATMHSIT), in partnership with the Maryland Governor’s Office of Crime Control and Prevention, and the Virginia Department of Criminal Justice Services, is pleased to present Demanding More Vigilance: Synthetic Drugs in the District of Columbia, Maryland, and Virginia, a day-long symposium bringing behavioral health, medical, scientific, legislative, criminal justice, and education leaders together to examine the current landscape of synthetic drugs in the District of Columbia, Maryland, and Virginia. Subject matter experts will describe the innovative approaches under way nationally, regionally, and locally to tackle this issue; address challenges; and discuss viable, coordinated response strategies.

Recognizing the porosity of our borders in this region, it is especially important to work together to address synthetic drugs in our jurisdictions. This symposium will serve as an informative and interactive forum that helps to further a comprehensive and coordinated approach that balances the public health and public safety concerns related to synthetic drug use throughout the Metropolitan area.

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**Agenda**

**Demanding More Vigilance**

**Synthetic Drugs in the District of Columbia, Maryland, and Virginia**

8am-8:45am  
**Registration and Breakfast**  
Atrium

9am-9:10am  
**Opening Remarks**  
Auditorium

- **Mannone A. Butler**, Executive Director, Criminal Justice Coordinating Council  
- **Clifford Keenan**, Director, Pretrial Services Agency for the District of Columbia  
  Chair, Criminal Justice Coordinating Council Synthetic Drugs Workgroup

9:10am-10am  
**Federal Efforts to Reduce Use of New Synthetic Psychoactive Substances**  
Auditorium

- **Christine Kourtides**, Senior Policy Advisor, Office of National Drug Control Policy  
- **Special Agent John R. Scherbenske**, Executive Assistant to the Deputy Assistant Administrator of the Office of Diversion Control, Drug Enforcement Administration
10am-10:10am Remarks from the Mayor

Auditorium

Muriel Bowser, Mayor of the District of Columbia

10:10am-11:10am Where We Stand: Synthetic Drug Testing

Auditorium

Discussion about the best practices, progress, and challenges in synthetic drug testing.

Objectives: (1) delve into the science behind the testing; (2) learn about emerging testing technologies and practices; and (3) understand the current limitations to synthetic drug testing.

Moderator: Dr. Jenifer Smith, Director, DC Department of Forensic Sciences

E. Erin Artigiani, Deputy Director of Policy, University of Maryland Center for Substance Abuse Research

Amy Billing, Project Director MDCSL and CDEWS, University of Maryland Center for Substance Abuse Research

Linda Jackson, Director, VA Department of Forensic Science

Cliff Keenan, Director, Pretrial Services Agency for the District of Columbia

Dr. Roger Mitchell, Chief Medical Examiner, Office of the Chief Medical Examiner for the District of Columbia

11:10am-11:25am Morning Break

11:25am-12:30pm Understanding the Impact: Health Responses to Synthetic Drugs

Auditorium

An exploration of best practices and challenges of treating individuals who have used synthetic drugs from medical, public, and behavioral health perspectives.

Objectives: (1) learn about the medical, public, and behavioral health responses to synthetic drugs; and (2) explore leveraging existing health response strategies in the synthetic drugs context.

Moderator: Dr. LaQuandra Nesbitt, Director, DC Department of Health

Stephen T. Kaminski, Executive Director, American Association of Poison Control Centers

Dr. Tanya A. Royster, Director, DC Department of Behavioral Health

Rafael Sa'adah, Acting Deputy Fire Chief, DC Fire and Emergency Medical Services Department

12:30pm-2pm Luncheon

Main Ballroom

Public Safety and Criminal Justice Perspectives on Synthetic Drugs

Tackling synthetic drugs in the region from public safety, law enforcement, and prosecutorial perspectives.

Objectives: (1) identify various public safety responses to synthetic drugs; (2) consider public safety challenges in addressing the issue of synthetic drugs; and (3) highlight successes and promising strategies in dealing with synthetic drugs.

Moderator: Kevin Donahue, Deputy Mayor for Public Safety and Justice for the District of Columbia

Robin Hoey, Commander, Narcotics and Special Investigations Division, Metropolitan Police Department
Quintin Kelly, Lieutenant, Virginia State Police

Karl A. Racine, Attorney General for the District of Columbia

Denise Simmonds, Acting Principal Assistant United States Attorney, Office of the United States Attorney for the District of Columbia

Lieutenant Ronald G. Smith, Deputy Director, Special Investigations Division, Montgomery County Police Department

2pm-3:15pm  Dispelling Myths and Dropping Knowledge  Main Ballroom

Discussion with youth about the real life impact of synthetic drugs.

Objectives: (1) understand myths and facts about synthetic drugs; and (2) consider innovative ways to reach out to those who are affected by synthetic drug use.

Moderator: Rahim Jenkins, Program Manager, Department of Youth Rehabilitation Services

Jessica Dildy

Brittney Floyd

3:15pm-3:30pm  Afternoon Break

3:30pm-4:30pm  Moving Forward Together: Developing a Comprehensive Regional Synthetic Drug Response Strategy  Main Ballroom

Discussion highlighting efforts under way in our respective jurisdictions to address synthetic drug use as well as the ways in which we can better collaborate regionally to further a comprehensive and coordinated approach that balances the public health and public safety concerns related to synthetic drug use throughout the Metropolitan area.

Objective: explore opportunities for regional collaboration on this issue.

Moderator: Courtney Snowden, Deputy Mayor for Economic Development

Victoria Cochran, Deputy Secretary of Public Safety and Homeland Security, Commonwealth of Virginia

Phil Mendelson, Chairman, Council for the District of Columbia

Katherine A. Klausmeier, Maryland State Senator, District 8 (Baltimore County)

4:30pm-4:45pm  Closing Remarks  Main Ballroom

Mannone Butler, Executive Director, Criminal Justice Coordinating Council for the District of Columbia
Summary
Demanding More Vigilance

Synthetic Drugs in the District of Columbia, Maryland, and Virginia

Symposium Summary

On September 16, 2015, the Criminal Justice Coordinating Council for the District of Columbia’s Substance Abuse Treatment and Mental Health Services Integration Taskforce (SATMHSIT), in partnership with the Maryland Governor’s Office of Crime Control and Prevention and the Virginia Department of Criminal Justice Services, convened this day-long symposium to bring behavioral health, medical, scientific, legislative, criminal justice, and education leaders together to examine the current landscape of synthetic drugs in the District of Columbia, Maryland, and Virginia.

This symposium was a follow up to February 2013’s Synthetic Drugs: Myths, Facts, and Strategies, which raised awareness about the proliferation of synthetic drugs in the District of Columbia, and July 2014’s The Real Deal on Synthetic Drugs, which explored shifts in the District’s synthetic drugs landscape and continued the dialogue on local response strategies.

Recognizing the porosity of our borders in this region, it is especially important to work together to address synthetic drugs across our jurisdictions. This was the impetus behind this year’s symposium, during which subject matter experts described the innovative approaches under way nationally, regionally, and locally to tackle this issue; addressed challenges; and discussed how to foster a comprehensive and coordinated approach that balances the public health and public safety concerns related to synthetic drug use throughout the Metropolitan area.

During the Federal Efforts to Reduce Use of New Synthetic Psychoactive Substances session, symposium attendees learned about existing international, federal, and state responses to synthetic drugs and the challenges posed by synthetic drugs at the federal level. During Where We Stand: Synthetic Drug Testing, a panel of regional experts discussed current best practices and the challenges and limitations of synthetic drug testing. The Understanding the Impact: Health Responses to Synthetic Drugs panel offered an opportunity for a discussion of the medical, public health, and behavioral health challenges of treating individuals who have used synthetic drugs. During Public Safety and Criminal Justice Perspectives on Synthetic Drugs, regional law enforcement and public safety officials presented on public safety responses to synthetic drugs, as well as successes and promising strategies. Dispelling Myths and Dropping Knowledge featured an interactive panel composed of local young adults who discussed the real-life impact of synthetic drugs on young people around the region. The Moving Forward Together panel served as a forum for regional leaders to discuss opportunities for collaboration and the development of a comprehensive and coordinated approach to synthetic drug use throughout the Metropolitan area.

What Are Synthetic Drugs?

Synthetic drugs, which include synthetic cannabinoids and synthetic cathinones, are mistaken as being “legal” alternatives to drugs like marijuana, cocaine, methamphetamine, and MDMA (Ecstasy). Manufacturers of
synthetic drugs create and produce these substances to mimic the effects of controlled substances.

Synthetic cannabinoids typically consist of a blend of herbs and plant material sprayed with one or more chemical compounds or metabolites that are believed to bind to the same brain receptors as THC, the principal psychoactive constituent of marijuana. Colloquially referred to as K2 or Spice, synthetic cannabinoids are sold in retail stores and on the internet as “herbal incense” or “potpourri,” and are often marked “not for human consumption.” These substances are often smoked in joints, pipes, or even e-cigarettes, or ingested in tea. People who smoke synthetic cannabinoids may experience adverse health effects affecting the psychological, neurological, cardiovascular, metabolic, gastrointestinal, and autonomic systems.

Sold in retail stores and on the internet as “bath salts,” “Molly,” and “Flakka,” synthetic cathinones are structurally and pharmacologically similar to amphetamine, Ecstasy, and other related substances, which stimulate the central nervous system. As with synthetic cannabinoids, synthetic cathinones have been used in e-cigarettes and vape pens.

Federal Efforts to Reduce Use of New Synthetic Psychoactive Substances

The Office of National Drug Control Policy (ONDCP) is a component of the Executive Office of the President, created by the Anti-Drug Abuse Act of 1988 to advise the President on drug control issues. ONDCP coordinates drug control activities and related funding across the Federal Government and develops the National Drug Control Strategy, which sets forth a comprehensive plan each year to reduce illicit drug use, the availability of drugs, and the consequences of drug use in the United States.

Because the term “synthetic drugs” could technically be used to describe any drug that has been manufactured, including legal drugs with medicinal applications, synthetic drugs designed to have psychoactive effects are referred to as “new psychoactive substances.” Types of new psychoactive substances include cannabinoid synthetics (e.g. “Spice,” “K2”), stimulant synthetics (e.g. “bath salts”), hallucinogenic synthetics (e.g. “NBOMes”), and opioid synthetics (e.g. “MT-45”).

These drugs are manufactured mostly in China and India, and are sold online and in stores in the United States. Suppliers bill these substances as safe or legal alternatives to traditional illicit drugs and often target young people as their intended consumers. These substances are often marked “not for human consumption” or “for novelty use only” in an effort to bypass US laws dealing with illicit drug use and availability.

The short- and long-term effects of most synthetic substances on the human body have not been studied and are unknown, making their use very dangerous. Users cannot be sure of the precise chemical constituents of these substances, which can contain toxic impurities, byproducts, or adulterants. Often, products are intentionally mislabeled or have deceptive packaging. There is no quality control in the manufacture of synthetics. Testing has revealed that the compounds in the same packaging change from one week to the next, with different substances in each batch, and even multiple drugs in the same package.

The rise and proliferation of new psychoactive substances is a global phenomenon. As of 2013, the United Nations Office on Drugs and Crime (UNODC) had identified 348 distinct new psychoactive substances. So far in 2015, UNODC has already received reports of 200 new substances, in addition to the 348 previously identified substances.

ONDCP faces challenges in identifying the number and names of these substances, the routes of ingestion, and developing testing for new substances. To address this international problem, organizations such as the World Health Organization, UNODC, and the International Narcotics Control Board have been holding bilateral and multilateral meetings to begin developing a
comprehensive international approach to synthetics. On a national level, a wide range of agencies and organizations are collaborating on synthetics, including the Department of Defense, Department of Homeland Security, Drug Enforcement Agency, FBI Department of Labor, Department of Agriculture, and Department of Education.

According to a 2014 survey, the annual prevalence of synthetic cannabinoid use continued to decline among high school seniors — 5.8% of high school seniors reported use in 2014, which was about half of the peak level in 2011 (11.4%) when usage was first measured. 5.4% of 10 graders and 3.3% of 8th graders reported using synthetic cannabinoids, which also represent downward trends from 2011. While synthetic cannabinoids are not the most widely used substance, the serious consequences of their use merit close attention.

The federal government is prioritizing education, research, prevention, and the reduction of manufacture and distribution to respond to the emerging threat of new psychoactive substances. In FY2014, the National Institute on Drug Abuse (NIDA) funded research related to synthetic cannabinoids, cathinones, and hallucinogens in order to better understand the pharmacology of these compounds and develop antagonists to counteract the toxic effects on the patients admitted to emergency rooms.

ONDCP funds the Drug-Free Communities Support Program, which provides funding to community-based coalitions to prevent youth substance abuse. The program emphasizes the importance of community in preventing youth drug use. The federal government is spending more on prevention and treatment than in the past, focusing more on the public health aspects to drug use.

Understanding the importance of information-sharing, ONDCP is developing a toolkit that will serve as a one-stop resource for information on synthetics for communities. This toolkit will be available to the public in the near future.

Remarks from the Mayor

Muriel Bowser, Mayor of the District of Columbia, provided remarks to attendees emphasizing the importance of addressing synthetic drugs, a public health and a public safety issue. Mayor Bowser noted that addressing synthetic drug use is also an economic issue, which stunts job creation and economic development in the DC Metropolitan region. She stressed the need for a public service campaign highlighting the effects and dangers of these drugs, such as the Department of Behavioral Health (DBH) “K2 Zombie” campaign. Mayor Bowser praised the work of the Fire and EMS Department, which has been confronted with an acute strain on its delivery of emergency services in the face of the rise of synthetic drug use.

The Mayor announced a zero-tolerance policy on retailers for synthetic drug sales, with businesses that possess synthetics facing harsh penalties for the first offense and the loss of their business license after a second offense. A bill is before the Council for the District of Columbia that would allow for the suspension or revocation of a business license of a business engaged in the buying or selling of synthetic drugs, enable the Chief of Police to seal business premises for up to 96 hours for the buying or selling of synthetic drugs, provide for an administrative hearing after the sealing of business premises, and designate the sale of synthetic drugs as a per se imminent danger to the health and safety of District residents. This bill (Bill 21-0261) is similar to the emergency and temporary legislation passed by the Council in July 2015. Synthetic drug testing and data collection efforts will also be ramped up in the District.

Where We Stand: Synthetic Drug Testing

The Community Drug Early Warning System (CDEWS) provides rapid information about emerging drug use in local communities by sampling anonymous urine specimens already collected, tested, and ready to be discarded by local criminal justice programs. CDEWS re-tests the specimens for an expanded panel of drugs. The
first study (CDEWS-1), completed in September 2013, re-tested samples from adult arrestees and parole/probation populations in the Washington, DC, and Richmond, VA, Metropolitan areas to identify synthetic cannabinoid use. Synthetic cannabinoid metabolites were equally or more likely to be detected in specimens that had passed the local criminal justice system drug tests than in those that failed, suggesting that people were using them to avoid detection. The University of Maryland Center for Substance Abuse Research (CESAR) reviewed the methodology for CDEWS and conducted a second study (CDEWS-2) in 2014 that expanded testing to new sites and populations, added a juvenile population, and tested all samples for synthetic cannabinoids. The number and types of synthetic cannabinoids detected in CDEWS-2 varied across site and population. Young males (ages 21-30) were most likely to test positive. CDEWS has limitations, and the results are not generalizable because persons being tested by criminal justice system monitoring programs are typically at high risk for drug abuse and do not represent the greater population from which they come. However, drug trends in high risk criminal justice populations may foreshadow drug use trends that show up later in the general population.

The Virginia Department of Forensic Science (DFS) houses a Controlled Substances Section, which tests and reports on substances controlled in Virginia or federally. There are four (4) state testing laboratories. Most of the testing is conducted on blood samples, as opposed to urine. DFS also conducts testing on driver and post-mortem blood samples.

The Pretrial Services Agency for the District of Columbia (PSA) conducts drug testing for persons on probation/parole and supervised release, as well as in family court cases. PSA tests 30,000-35,000 samples monthly. In 2012, PSA was sending samples to private labs for testing, which is quite expensive. Currently, PSA partners with the Office of the Chief Medical Examiner (OCME), which assists with sample analysis; however, current capacity at OCME allows only for the testing of about 200 samples per month. Beginning in October of this year, PSA will add a new initial screening test to its current panel of drug tests, testing all incoming specimens for the presence of the more commonly used synthetic cannabinoids. This new testing protocol will help to reduce the appeal of synthetic drugs as a way to avoid detection of substance use.

OCME supports District and federal law enforcement as well as public health-related initiatives, including the identification of emerging public health trends, such as synthetic drugs. Synthetic cannabinoid testing is conducted via Liquid Chromatography tandem Mass Spectrometry (LC-MS/MS), through which particles are charged and separated in order to allow for detection. Synthetic cannabinoid testing is challenging due to the fact that these substances are highly lipophilic (meaning they tend to combine with or dissolve in lipids or fats) and little is known about metabolite stability in storage conditions.

OCME made several recommendations for the improvement of synthetic cannabinoid testing. Jurisdictions must maintain comprehensive testing, which means testing patients in DUI cases, pretrial, at emergency departments, and post-mortem. Jurisdictions should also promote basic scientific research into the nature of synthetics.

Understanding the Impact: Health Responses to Synthetic Drugs

Emergency rulemaking in the District now requires hospitals to collect urine samples from patients who present with symptoms consistent with having taken a synthetic cannabinoid. The rulemaking also recommends that hospitals collect blood samples from such patients as well. Hospitals are required to store urine and blood samples in accordance with Department of Health (DOH) protocols and turn over the samples for testing by the Office of the Chief Medical Examiner. The information collected by DOH is de-identified and OCME removes all personal identifying information from samples.
Testing results for 96 of the 196 individuals screened under these newly-implemented protocols were available as of the date of the symposium. Of those 96, 77 individuals tested positive for drugs, with 57 testing positive for synthetic cannabinoids. Three (3) out of four (4) individuals who tested positive were male, with an average age of 36 years of age. Fifty-eight percent (58%) of individuals tested positive for multiple synthetic compounds. Very little is known about the short- and long-term effects, addiction potential, or impact on the human brain of daily or regular synthetic drug use.

The American Association of Poison Control Centers (AAPCC) represents the nation’s 55 poison control centers, which provide free expert information and treatment advice around the clock via the Poison Help Line. Calls are answered by specialists in poison information, including nurses, toxicologists, pharmacists and physicians. Poison control centers receive about 3.1 million calls annually. AAPCC collects health record information through the National Poison Data System (NPDS), which is an electronic record collection system. With uploads to NPDS about every eight (8) minutes, the system provides a near real-time snapshot of poisoning conditions nationwide. NPDS data shows a major increase in exposure to synthetic drugs between 2010 and now (2,906 reported cases in 2010 versus 5,652 cases through August 30, 2015). The DC Metropolitan region has some of the highest numbers of synthetic cannabinoid exposures in the United States, with the District of Columbia, Maryland, and Virginia ranking 2nd, 4th, and 9th respectively in cumulative calls. Eight percent (8%) of all US synthetic drug cases received by poison control centers come from this region.

Among its many functions, the District of Columbia’s Department of Behavioral Health (DBH) works to raise public awareness about the danger of synthetic drug use and provides treatment to individuals who have used synthetics. Treatment responses include supporting the physical care of patients, providing addiction treatment services, and addressing the underlying behavioral health condition(s) of the affected person.

In 2013, DBH launched the K2 Zombie campaign to raise awareness among use ages 12 to 16 about the dangers of synthetic drug use. The campaign utilizes an array of media, including print ads, a website, and social media, to reach young people. Online surveys with youth and parents indicate that 92% of those surveyed had seen or heard the message about the dangers of synthetics, and 88% indicated they were not at all likely to purchase or use synthetic drugs in the next 90 days. The campaign has received 9 national advertising and public relations awards.

The District of Columbia Fire and Emergency Medical Services Department (FEMS) has seen a rapid rise in the number of synthetic cannabinoid patient transports. In 2012-2013, FEMS responded to an average of 5 calls per day related to synthetic cannabinoids. The department has seen new peaks of synthetic cannabinoid transports during the summer of 2015, averaging 15, 24, 25, and 34 daily calls during the months of May, June, July, and August, respectively. Calls for synthetic cannabinoid transports also have a significant correlation with combative or aggressive behavior from the consumer, meaning that responding to synthetic drug calls require more resources, in terms of both time and personnel.

In order to address synthetic drug use, FEMS is initiating operational monitoring of geographic and temporal overdose clusters with multiple overdose notifications triggering a potential multiple/mass-casualty incident management response. Suspected synthetic drug patients are transported across all appropriate hospital emergency departments to mitigate operational impact on any one emergency department. FEMS actively engages with DC hospitals through monthly meetings with emergency department leaders.

Public Safety and Criminal Justice Perspectives on Synthetic Drugs

The Narcotics and Special Investigations Division (NSID) of the Metropolitan Police Department (MPD) conducts criminal enforcement operations related to synthetic
drugs, including street level enforcement, store inspections, and investigations. NSID conducts compliance checks of businesses to disrupt the sale of synthetics, many of which are conducted in cooperation with the Department of Consumer and Regulatory Affairs (DCRA). NSID also partners with federal law enforcement, state and local agencies, and the US Postal Service to conduct investigations involving synthetic drug trafficking into the District. On September 1, 2015, MPD seized 116 kilograms (19,000 packets) of the synthetic drug “Bizarro,” coming from a warehouse in Maryland and intended for store and street sales in the District of Columbia. The estimated street value of this seizure was $2.3 million.

The Virginia State Police has worked with the Department of Justice Organized Crime Drug Enforcement Task Force since 2012 to combat synthetic drug trafficking organizations. The Taskforce has seized millions in U.S. currency, over 500 pounds of various synthetic drugs, and has conducted over 100 undercover buys at retail locations in Virginia. From an enforcement perspective, the lack of field test kits for synthetic drugs is problematic in establishing probable cause.

Using appropriate language to describe the new psychoactive substances emerging in our community is critical. With the decriminalization and legalization of marijuana throughout the country, referring to synthetic cannabinoids as “synthetic marijuana” or “fake weed” underplays the pronounced distinction between marijuana and synthetic cannabinoids and may lead many to have a false sense of security as to the nature and effects of synthetic drugs.

As part of an effort by the National Association of Attorneys General, Karl Racine, Attorney General for the District of Columbia, joined with attorneys general from several other states to urge major oil companies to educate their lessees about the dangers of selling synthetics. The National Association of Attorneys General is working with the National Organization of Convenience Stores to train members on laws banning synthetic sales and potential hazards of running afoul of these laws. Attorney General Racine underscored the need for collaboration and reciprocity with neighboring states.

The United States Attorney’s Office (USAO) for the District of Columbia is attacking the problem of synthetics by identifying individuals in communities who are selling these drugs on the streets. USAO works with MPD to follow up with covert buys to see whether individuals are complying. The office also conducts programming to engage and educate youth on the dangers of synthetic drugs. There are stark penalty differences between District laws and Federal laws for synthetic drug offenses — an offense that is punishable by 5 years imprisonment in the District can lead to a 20-year to life sentence in federal court.

Montgomery County officials have focused enforcement efforts on businesses, particularly retail establishments, through the use of surveillance, undercover buys, and asset forfeiture. Efforts in Montgomery County have led to an overall decrease in synthetic drug use. Montgomery County has one distinct advantage over other jurisdictions in regulating retail establishments: in the county, all alcohol sales are controlled by the county, which gives enforcement officials leverage over any establishment that sells beer and wine. Thus, any business caught selling synthetic substances can have their license to sell alcohol immediately revoked. This provides a major disincentive for businesses to carry synthetic drugs.

**Dispelling Myths and Dropping Knowledge**

Local youth provided their perspective on the problem of synthetic drugs in the District during this panel discussion. The panelists noted that they did not perceive synthetic drugs to be the cause of the recent spike in violence in the District, in part because synthetics have been around for a little while. They also stated that persons in the community are hesitant to report individuals or businesses selling synthetic drugs out of a fear of being labeled a “snitch” or an informer. The
better approach would be to educate communities as a whole about the dangers of synthetic drugs and about government resources available for people needing assistance. Agencies must improve communication and information-sharing, in order to help shift the culture on synthetic drugs in the region.

The youth highlighted that the problem of synthetics is not only one that affects youth, but also adults: many young people have parents who are using synthetic drugs, and often imitate their behavior. Practitioners need to work more closely with the school systems, and develop a holistic approach in working with youth and parents.

**Moving Forward Together:
Developing a Comprehensive Regional Synthetic Drug Response**

Virginia instituted legislation in 2014 to address synthetic drugs by raising penalties for the distribution or sale of cannabimimetic agents as equivalent to Schedule I drugs and creating a temporary scheduling mechanism which is exempted from much of the usual regulatory process.

Data sharing is a necessity in addressing this problem. Resources and information should be coordinated on a regional level. In order for approaches to be validated, the scientific community must be able to share resources and methods. Jurisdictions must also make a commitment to further and promote research, in order to better understand the nature and effects of synthetic substances, and to improve rapid identification of substances. Testing for synthetics must be enhanced to keep up with the ever-growing number of synthetic agents, and testing must be comprehensive.

Although symposia such as this are helpful in sharing information, more conversation is needed on a more frequent basis. Additionally, emergency departments throughout the nation should be required to report instances of synthetic drug use. Such reporting would help us get a better grasp on the trends in usage.

Existing synthetic drug workgroups and taskforces throughout the region must collaborate in order to effectively address synthetic drug use in the region. Public health and public safety must work together to address this issue, because it is not a problem that can be solved by arrests.

Synthetic drug use in the region is an issue that requires a comprehensive and coordinated approach.

**About the Criminal Justice Coordinating Council**

The Criminal Justice Coordinating Council for the District of Columbia (CJCC) is an independent agency dedicated to continually improving the administration of criminal justice in the city. Under the guidance of our Executive Director, Mannone Butler, the CJCC serves as the forum for identifying issues and their solutions, proposing actions, and facilitating cooperation that will improve public safety and the related criminal and juvenile justice services for District of Columbia residents, visitors, victims and offenders.

The CJCC draws upon local and federal agencies and individuals to develop recommendations and strategies for accomplishing this mission, bearing in mind its guiding principles of creative collaboration, community involvement, and effective resource utilization.

The CJCC is committed to:

- **Facilitating systemic changes across the District’s juvenile and criminal justice systems through shared commitment and collaboration.**
- **Evaluating and promoting continuous improvements within the juvenile and criminal justice agencies in the District of Columbia.**
- **Increasing communication among criminal juvenile and criminal justice agencies to eliminate duplication and maximize available resources.**

The Criminal Justice Coordinating Council’s point of contact for the SATMHSIT and the Synthetic Drugs Workgroup is Michen M. Tah, Esq. She can be reached at **michen.tah@dc.gov** or (202) 442-9282.
Presentations
Federal Efforts to Reduce Use of New Synthetic Psychoactive Substances
FEDERAL EFFORTS TO REDUCE USE OF NEW SYNTHETIC PSYCHOACTIVE SUBSTANCES

September 2015

Christine Kourtides
Office of National Drug Control Policy
Office of National Drug Control Policy

- Component of the Executive Office of the President

- Coordinates drug-control activities and related funding across the Federal Government

- Produces the annual *National Drug Control Strategy*
New Psychoactive Substances

Synthetic drugs designed to have psychoactive effects:

- Cannabinoid synthetics: “Spice”, “K2”
- Stimulant synthetics: “Bath salts”
- Hallucinogen synthetics: “NBOMes”
- Opioid synthetics: “MT-45”, “AH7921”, Acetyl Fentanyl
Supply and Availability

• Manufactured/synthesized mostly in China
• Sold online and in stores in the United States
• Marketed as “not for human consumption” or “for novelty use only.”
  – Marketed to young people using logos and patterns drawn from popular culture - like Scobby Snax
• Described by suppliers as safe or legal alternatives to traditional illicit drugs
• Global phenomenon
Growth of NPS

Fig. 2: Number of NPS reported at the global level, 2009 to 2013 (cumulative)

- 2009: 166
- 2010: 206
- 2011: 243
- 2012: 251
- 2013: 97
Growth of NPS

Global SMART has already received reports of 200 new substances for 2015
Challenges:

- Number
- Names
- Routes of ingestion
- Testing
2014 Monitoring the Future (MTF)

- Past year use of synthetic cannabis (spice)
  • Nearly 6 percent of 12th graders
  • 5.4 percent of 10th graders
  • 3.3 percent of 8th graders

- Past year use of synthetic cathinones (bath salts)
  • Use rates did not exceed 1 percent for 12th, 10th, or 8th graders
Use Rates

American Association of Poison Control Centers

Counts for synthetic cannabinoids were at

– A high in **2011 with 6,968 cases**

– Cases were steadily decreasing until 2015

– As of **August 2015, 5,652 cases** were reported

  (over 2,700 were reported in April and May 2015)
Use Rates

Community Drug Early Warning System (CDEWS)

- ONDCP funded pilot study in 2013
- Synthetic cannabinoids were as likely to be found in persons who had initially tested positive for marijuana, cocaine, heroin, methamphetamine, or PCP as in persons who had initially not tested positive for these drugs
- Replicated study in 2015
  - Found many new synthetic cannabinoids
  - Found many differences from site to site

Adults/juveniles in local criminal justice testing drug testing programs likely turn to synthetic cannabinoids to avoid detection
Use Rates

National Drug Early Warning System (NDEWS)

• Focused on monitoring emerging drug trends.
• 2014, building upon and expanding a former NIDA initiative, the Community Epidemiology Work Group
• Established 12 sentinel sites across the country
• Virtual community of scientists, government officials, public health experts, law enforcement representatives, and others for sharing information and assisting with local research
• Information collection include scanning social media and news media, developing collaboration with the American Association of Poison Control Center (AAPCC), and conducting site visits to local communities experiencing emerging drug problems or changes in drug use trends

Dangers of Use

Life-threatening adverse medical consequences

• Synthetic Cannabinoids
  – Inhalation of smoke using pipes, joints, or vaping
  – Effects: increased heart rate, vomiting, kidney injury, hallucinations, panic attacks, persistent psychosis

• Synthetic Cathonines
  – Oral ingestion, snorting, intravenous injection
  – Effects: increased heart rate and blood pressure, hypothermia, agitation, delirium, psychosis, death
Dangers of Use

• Biological effects of most NPS have not been studied and are unknown
• Users cannot be sure of the precise chemical constituents of NPS
• NPS can contain toxic impurities, byproducts, or adulterants
• Packaging and labelling on the products is intentionally mislabeled
Federal Priorities

Data Collection
Education/Research
Prevention
  - Preventing Initiation
  - Municipal Ordinances
Reducing Manufacture and Distribution
  - Controlled Substances Act/Scheduling
  - Domestic Law Enforcement
  - Interdiction
  - Supply Reduction
Federal Priorities

2014 National Drug Control Strategy

• Respond to the Emerging Threat of Synthetic Drugs
• Improve Information Systems for Analysis, Assessment and Local Management
Education and Research

Educational materials for a range of audiences

• Drug Facts publications
  – Synthetic Cathinones (“Bath Salts”) Drug Facts -- (Consumer reading level fact sheet)
  – DrugFacts: K2/Spice ("Synthetic Marijuana") -- (Consumer reading level fact sheet)
    http://www.drugabuse.gov/publications/drugfacts/k2spice-synthetic-marijuana

• Fact sheets for teens
  – Bath Salts  http://teens.drugabuse.gov/drug-facts/bath-salts

• Our Mind over Matter Series for middle schoolers
  – Mind Over Matter series: Hallucinogens
    http://teens.drugabuse.gov/educators/mind-over-matter/hallucinogens
In FY2014 NIDA funded:

- $4,388,093 related to synthetic cannabinoids
- $36,640 related to synthetic cathinones
- $760,470 related to synthetic hallucinogens

Current/Ongoing Research:

Chemistry of synthetic cannabinoids and related compounds to better understand pharmacology

Developing ultra-short acting antagonists to treat the toxic effects of the patients admitted to ERs
Exploring subcultural/social contexts of bath salt use including the subculture developing around use and sales, changes in product, pricing and packaging, and levels of market- and use-related violence

• The study will document users' perceptions of health and safety risks; for example, it will identify subculture etiquettes by which regular users may modulate consumption so as to avoid serious consequences

• The knowledge emerging from this study will enable the development of more accurate drug education, prevention, treatment and health related programs for bath salts users

Creating educational materials about synthetic cannabinoids for use by physicians, other addiction treatment specialists, and policymakers in Single State Authority (SSA) offices (w SAMHSA and ATTC)
Drug-Free Communities Support Program

• Small amount of Federal funding combined with local resources and volunteer support

• Mobilize community leaders to identify and respond to the drug problems unique to their communities

• Focus on community change to prevent youth drug use
Goals of the Program:

• **To establish and strengthen collaboration among communities**, nonprofit agencies, and Federal, State, local and tribal governments to prevent and reduce substance use among youth.

• **To reduce substance use among youth** by addressing the factors in a community that increase the risk of substance abuse and promoting the factors that minimize the risk of substance abuse.
Prevention: Local Examples

**DFC Coalition in IN:**
- Parent pledge campaign; a role model program; and prescription drug education. 500 adult signatures in pledge campaign; existing role model program working to update; hosted two prescription/synthetic drug trainings, presented by a DEA agent, with more than 250 professionals attending both sessions combined. Junior high and high school students attended sessions. We have begun to create awareness in our community about the seriousness of prescriptions and synthetics. One of the first counties in Southeastern Indiana to pass an ordinance banning the sale of synthetics.

**DFC Coalition in FL:**
- Provided data to County Administration and the County Attorney’s office to inform a possible synthetics drug ordinance. Disseminated a synthetics survey (K2 Spice/Bath Salts) through Teen Drug Court and Juvenile Detention

**DFC Coalition in NH:**
- Advocated for ordinance citywide banning sale, manufacture, use, possession, and distribution of synthetic drugs.
Where We Stand:
Synthetic Drug Testing
CDEWS-2 Replication Study:
Focus on Synthetic Cannabinoids

Demanding More Vigilance: Synthetic Drugs in DC, MD, VA
September 16, 2015
Presented by: Erin Artigiani, M.A. and Amy Billing, M.S.S.A.

This presentation is based on the complete CDEW-s report:

Center for Substance Abuse Research (CESAR)
University of Maryland, College Park
www.cesar.umd.edu

The information and opinions expressed herein are the views of the authors and do not necessarily represent the views of the Office of National Drug Control Policy (ONDCP) of the Executive Office of the President, or any other agency of the Federal Government.
Acknowledgements

• Pretrial Services Agency for the District of Columbia
• White House Office of National Drug Control Policy
• Maryland Governor’s Office of Crime Control and Prevention
• Friends Medical Laboratory, Inc. and Clinical Reference Laboratory (CRL)
Purpose of CDEWS

• Fill the need for a rapid and low-cost system for identifying emerging drugs at the local community level (ONDCP, 2014)

• A useful drug use monitoring system needs to be capable of rapidly responding to newly available drugs and of producing results quickly at minimal cost
CDEWS Methodology

• Funded by ONDCP
• Collects samples from CJS drug testing programs
• Selects specimens that tested positive or negative and are ready to be discarded, without regard to age, gender, or charge
• Re-test for an expanded panel, including synthetic cannabinoids and designer stimulants
CDEWS-2 Goals

• Replicate the CDEWS methodology in Washington, DC
• Expand CDEWS methodology to new sites and populations
• Test all specimens for synthetic cannabinoids
• Add a juvenile population
## Synthetic Cannabinoid Metabolites

<table>
<thead>
<tr>
<th>Tested for in CDEWS 1</th>
<th>Added in CDEWS 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM-2201</td>
<td>APINACA (AKB-48)</td>
</tr>
<tr>
<td>JWH-018</td>
<td>5F-AKB-48</td>
</tr>
<tr>
<td>JWH-019</td>
<td>BB-22</td>
</tr>
<tr>
<td>JWH-073</td>
<td>PB-22</td>
</tr>
<tr>
<td>JWH-081</td>
<td>5F-PB-22</td>
</tr>
<tr>
<td>JWH-122</td>
<td>AB-PINACA</td>
</tr>
<tr>
<td>JWH-210</td>
<td>5F-AB-PINACA</td>
</tr>
<tr>
<td>JWH-250</td>
<td>ADB-PINACA</td>
</tr>
<tr>
<td>MAM-2201</td>
<td>ADBICA</td>
</tr>
<tr>
<td>RCS-4</td>
<td></td>
</tr>
<tr>
<td>UR-144</td>
<td></td>
</tr>
<tr>
<td>XLR-11</td>
<td></td>
</tr>
</tbody>
</table>
## Toxicologists Interviewed for CDEWS-2

### Drug Testing Experts

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Armed Forces Medical Examiner System (AFMES)</td>
</tr>
<tr>
<td>2</td>
<td>Washington-Baltimore HIDTA</td>
</tr>
<tr>
<td>3</td>
<td>Cayman Chemical</td>
</tr>
<tr>
<td>4</td>
<td>NMS Labs</td>
</tr>
<tr>
<td>5</td>
<td>Arkansas Public Health Laboratory, Arkansas Department of Health</td>
</tr>
<tr>
<td>6</td>
<td>U.S. Drug Enforcement Administration (DEA) Western Lab</td>
</tr>
<tr>
<td>7</td>
<td>Addiction Research and Treatment Services, University of Colorado Denver</td>
</tr>
<tr>
<td>8</td>
<td>Rocky Mountain HIDTA</td>
</tr>
<tr>
<td>9</td>
<td>National Institute on Drug Abuse, National Institutes of Health Biomedical Research Center</td>
</tr>
<tr>
<td>10</td>
<td>Denver Office of Drug Strategy &amp; Denver CEWG</td>
</tr>
<tr>
<td>11</td>
<td>U.S. Drug Enforcement Administration (DEA), Denver Division</td>
</tr>
<tr>
<td>12</td>
<td>Pretrial Services Agency for the District of Columbia</td>
</tr>
<tr>
<td>13</td>
<td>U.S. Drug Enforcement Administration (DEA), Field Intelligence, Denver Division</td>
</tr>
<tr>
<td>14</td>
<td>Friends Medical Laboratory</td>
</tr>
<tr>
<td>15</td>
<td>Denver Police Department Crime Laboratory</td>
</tr>
</tbody>
</table>
CDEWS Limitations

• CDEWS provides a snapshot of the relative recent use of tested drugs in the tested populations; results are not generalizable to all offenders.

• Persons being tested by CJS monitoring programs are typically at high risk for drug abuse and do not represent the greater population from which they come; However, drug trends in high risk criminal justice populations may foreshadow drug use trends that show up later in the general population.

• Lengthy holding times due to legal requirements may have resulted in the degradation of some specimens, making it less likely to detect certain drugs such as designer stimulants (Huestis, 2013).

• Urine tests alone cannot determine whether or not a prescription drug was used under medical supervision. Rather, CDEWS can best be viewed as providing timely information about local drug use and availability that can be used to target communities where additional information may be collected.
CDEWS Study Sites

CDEWS-1 2013
• Washington, DC – adult parolees/probationers
• Washington, DC – pretrial surveillance
• Washington, DC – lockup
• Virginia – Chesterfield Community Corrections Services (Probation)
• Maryland - Prince George’s County Drug Court

CDEWS-2 2014
• Washington, DC – adult parolees/probationers
• Washington, DC – juvenile detainees
• Denver, CO – adult drug court participants
• Tampa, FL – Juvenile Assessment Center (JAC) Program detainees
CDEWS-1
Metabolites Found in All Synthetic Cannabinoid Positive Specimens from Five CJS Populations in Three Sites, 2013
(N=118)

# Metabolites Found In All Synthetic Cannabinoid Positive Specimens, By CDEWS-2 Population, 2014

<table>
<thead>
<tr>
<th>Metabolites Detected</th>
<th>Adult Parole &amp; Probation – Washington, DC (N=70)*†</th>
<th>Juvenile Family Court – Washington, DC (N=38)^</th>
<th>Adult Drug Court – Denver, CO (N=19)*‡</th>
<th>Juvenile Assessment Center – Tampa, FL (N=10)^</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(12/5/13-3/18/14)</td>
<td>(5/21/14-7/30/14)</td>
<td>(8/25/13-2/12/14)</td>
<td>(9/20/14-10/31/14)</td>
</tr>
<tr>
<td><strong>UR-144</strong></td>
<td>99%</td>
<td>71%</td>
<td>53%</td>
<td>100%</td>
</tr>
<tr>
<td><strong>PB-22</strong></td>
<td>41</td>
<td>5</td>
<td>37</td>
<td>0</td>
</tr>
<tr>
<td><strong>5F-PB-22</strong></td>
<td>13</td>
<td>26</td>
<td>11</td>
<td>0</td>
</tr>
<tr>
<td><strong>XLR-11</strong></td>
<td>4</td>
<td>26</td>
<td>11</td>
<td>0</td>
</tr>
<tr>
<td><strong>AKB-48</strong></td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>MAM-2201</strong></td>
<td>0</td>
<td>0</td>
<td>32</td>
<td>0</td>
</tr>
<tr>
<td><strong>JWH-018</strong></td>
<td>0</td>
<td>3</td>
<td>32</td>
<td>0</td>
</tr>
<tr>
<td><strong>JWH-122</strong></td>
<td>0</td>
<td>0</td>
<td>21</td>
<td>0</td>
</tr>
<tr>
<td><strong>JWH-073</strong></td>
<td>0</td>
<td>3</td>
<td>11</td>
<td>0</td>
</tr>
<tr>
<td><strong>AB-PINACA</strong></td>
<td>0</td>
<td>13</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td><strong>ADBICA</strong></td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td><strong>5F-AB-PINACA</strong></td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Number of Above Metabolites (of 12) Detected</strong></td>
<td>57%</td>
<td>68%</td>
<td>63%</td>
<td>100%</td>
</tr>
<tr>
<td><strong>1</strong></td>
<td>30</td>
<td>24</td>
<td>11</td>
<td>0</td>
</tr>
<tr>
<td><strong>2</strong></td>
<td>13 { } 43%</td>
<td>8 { } 32%</td>
<td>26 { } 37%</td>
<td>0</td>
</tr>
<tr>
<td><strong>3+</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>
Metabolites Identified in SC Positive Specimens from Washington, DC, CDEWS-1 and CDEWS-2 Studies

<table>
<thead>
<tr>
<th>Percentage Positive For:</th>
<th>CDEWS-1 Three Adult CJS Populations (N=107)*</th>
<th>CDEWS-2 Adult Parole/Probation Population (N=70)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UR-144</td>
<td>95%</td>
<td>99%</td>
</tr>
<tr>
<td>XLR-11</td>
<td>38***</td>
<td>4***</td>
</tr>
<tr>
<td>JWH-018</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>JWH-073</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>PB-22</td>
<td>Not Tested</td>
<td>41</td>
</tr>
<tr>
<td>5F-PB-22</td>
<td>Not Tested</td>
<td>13</td>
</tr>
<tr>
<td>AKB-48</td>
<td>Not Tested</td>
<td>1</td>
</tr>
</tbody>
</table>
Percentage of Specimens from Three DC CJS Male Populations Combined Testing Positive for Synthetic Cannabinoids, by PSA Drug Screen Result and Age, 2013

(N=341 specimens from Washington, DC Parole & Probation, Pretrial Surveillance and Lockup)

CDEWS-2
Percentage of Specimens for Adult Male DC Parolees/Probationers and Juvenile Males Testing Positive* for Synthetic Cannabinoids, by PSA Drug Screening Result and Age, 2014
(N=453)‡
Sources for Tracking Emerging Drug Trends

• National Drug Early Warning System (NDEWS) Network – www.ndews.org
• CESAR FAX Synthetic Cannabinoids Series – www.cesar.umd.edu
• National Institute on Drug Abuse (NIDA) - http://www.drugabuse.gov/
• American Association of Poison Control Centers (AAPCC) Alerts – www.aapcc.org
• United Nations Office on Drugs and Crime, Early Warning Advisories and other reports – www.unodc.org
• NMS Lab Reports and Webinars – www.nmslabs.com and http://www.designerdrugtrends.org/
• Scientific Working Group for the Analysis of Seized Drugs (SWGDRUG) - http://www.swgdrug.org/monographs.htm
• European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) – http://www.emcdda.europa.eu/
• Center for Forensic Science Research and Education – http://forensicscienceeducation.org/
Synthetic Drug Testing in Virginia

Linda Jackson
Virginia Department of Forensic Science

Demanding More Vigilance: Synthetic Drugs in the District of Columbia, Maryland, and Virginia
September 16, 2015
Department of Forensic Science

- 47 Controlled Substances examiners
  - >30,000 cases in FY2015
- 27 Toxicology examiners
  - Office of the Chief Medical Examiner
  - DUI/DUID
  - Non-Implied Consent
  - >9,400 cases in FY2015
Testing of Synthetic Drugs

• Controlled Substances Section
  – Tests and reports identity for all substances controlled in Virginia or Federally

• Toxicology
  – Mainly tests blood
  – Identifies and quantitates several synthetic research chemicals
# Cannabimimetics (Jan. – Aug. 2015)

<table>
<thead>
<tr>
<th>Synthetic Cannabinoids</th>
<th># of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-(5-fluoropentyl)-3-(1-naphthoyl)indazole</td>
<td>7</td>
</tr>
<tr>
<td>1-Pentyl-3-(1-naphthoyl)indole (JWH-018)</td>
<td>3</td>
</tr>
<tr>
<td>1-Pentyl-3-(2-methoxyphenylacetyl)indole (JWH-250)</td>
<td>1</td>
</tr>
<tr>
<td>1-Pentyl-3-(4-methoxy-1-naphthoyl)indole (JWH-081)</td>
<td>1</td>
</tr>
<tr>
<td>5-fluoro-PB-22</td>
<td>21</td>
</tr>
<tr>
<td>AB-FUBINACA</td>
<td>58</td>
</tr>
<tr>
<td>AB-PINACA</td>
<td>100</td>
</tr>
<tr>
<td>ADB-PINACA</td>
<td>3</td>
</tr>
<tr>
<td>Cannab F 3-cyclopropoylindoles</td>
<td>27</td>
</tr>
<tr>
<td>UR-144</td>
<td>9</td>
</tr>
<tr>
<td>XLR-11</td>
<td>220</td>
</tr>
<tr>
<td>1-Butyl-3-(1-naphthoyl)indole (JWH-073)</td>
<td>1</td>
</tr>
<tr>
<td>PB-22</td>
<td>2</td>
</tr>
<tr>
<td>1-(5-Fluoropentyl)-3-(1-naphthoyl)indole (AM-2201)</td>
<td>3</td>
</tr>
<tr>
<td>1-Pentyl-3-(4-methyl-1-naphthoyl)indole (JWH-122)</td>
<td>3</td>
</tr>
<tr>
<td>Cannab H N-(adamantyl)-indole-3-carboxamides</td>
<td>1</td>
</tr>
<tr>
<td>AB-CHMINACCA</td>
<td>69</td>
</tr>
<tr>
<td>1-Pentyl-3-(2-chlorophenylacetyl)indole (JWH-203)</td>
<td>1</td>
</tr>
<tr>
<td>5F-AKB48</td>
<td>2</td>
</tr>
<tr>
<td>5-fluoro-AB PINACA</td>
<td>1</td>
</tr>
</tbody>
</table>
## Research Chemicals (Jan. – Aug. 2015)

<table>
<thead>
<tr>
<th>Research Chemicals</th>
<th># of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>25B-NBOMe</td>
<td>17</td>
</tr>
<tr>
<td>25C-NBOMe</td>
<td>28</td>
</tr>
<tr>
<td>25I-NBOMe</td>
<td>43</td>
</tr>
<tr>
<td>2C-P</td>
<td>1</td>
</tr>
<tr>
<td>3,4-methylenedioxyethcathinone (ethylone)</td>
<td>401</td>
</tr>
<tr>
<td>3,4-Methylenedioxy methylcathinone (Methylone)</td>
<td>24</td>
</tr>
<tr>
<td>4-Ethyl-2,5-dimethoxyphenethylamine (2C-E)</td>
<td>1</td>
</tr>
<tr>
<td>4-Iodo-2,5-dimethoxyphenethylamine (2C-I)</td>
<td>1</td>
</tr>
<tr>
<td>Alpha-pyrrolidinovalerophenone (alpha-PVP)</td>
<td>106</td>
</tr>
<tr>
<td>Butylone</td>
<td>1</td>
</tr>
<tr>
<td>Methoxetamine (MXE)</td>
<td>10</td>
</tr>
<tr>
<td>3,4-Methylenedioxy pyrovalerone (MDPV)</td>
<td>2</td>
</tr>
<tr>
<td>Acetoxydimethyltryptamine</td>
<td>6</td>
</tr>
<tr>
<td>4-Ethylmethcathinone (4-EMC)</td>
<td>4</td>
</tr>
<tr>
<td>4-Methylethcathinone (4-MEC)</td>
<td>1</td>
</tr>
<tr>
<td>4-Methylmethcathinone</td>
<td>1</td>
</tr>
<tr>
<td>Pentedrone</td>
<td>2</td>
</tr>
<tr>
<td>Benocyclidine (BCP, BTCP)</td>
<td>4</td>
</tr>
</tbody>
</table>

*Red text indicates that a method is also available in Toxicology.*
Laboratory Comparison

Number of Cases Completed Containing Compounds
(1/1/15 – 8/31/15)

- Western:
  - Cannabimimetic Agent: 168
  - Research Chemical: 83

- Eastern:
  - Cannabimimetic Agent: 56
  - Research Chemical: 104

- Northern:
  - Cannabimimetic Agent: 78
  - Research Chemical: 167

- Central:
  - Cannabimimetic Agent: 64
  - Research Chemical: 158

Legend:
- Cannabimimetic Agent
- Research Chemical
Drug Cases Submitted to DFS
Selected Drugs in CY2014, By VSP Division

- Benzodiazepines
- "Club Drugs"
- Cocaine
- Heroin
- Marijuana
- Methamphetamine
- Prescription Opioids
- Prescription Stimulants
- Cannabimimetic Agents

VSP1  VSP2  VSP3  VSP4  VSP5  VSP6  VSP7

62
Analytical Challenges

• General analytical scheme – screening less effective
  – No color tests
  – Not separated by TLC
  – Not always separated by GC
    • 100% Dimethylpolysiloxane
    • (5%-Phenyl)-methylpolysiloxane
  – Multiple compounds may be present
  – Obtaining reference materials for new compounds
Screening with DART-TOF

- Accurate Mass
- Quick

- Dissolve sample into suitable solvent
- Dip capillary tube in liquid/hold in DART gas stream
Case Example
Case Example

GC-MS data (TIC):
DART –TOF data showed multiple components, but only one peak (VF5-ms, 15m)

GC-FID data:
Two peaks evident (HP-1, 15m)
AB-FUBINACA at 5.41 min

GC-MS Data from TRACE Instrument (HP-1MS, 30m)
It should be noted that the other components indicated by DART-TOF were weakly observed on GC-MS and thus not reported.
Baseline GC Separation

- Best separation between AB-FUBINACA and ADB-CHMINACA
- HP-35 (15m)
- (35%-Phenyl)-methylpolysiloxane
Scheduled by Chemical Class

- Item 1: 0.254 gram of plant material, found to contain 1-propyl-2-methyl-3-(1-naphthoyl)indole (JWH-015). This compound is a synthetic cannabinoid as defined in § 18.2-248.1:1(A)(1)(b) and is within the structural class 3-(1-naphthoyl)indole.

Class: Napthoylindoles
THANK YOU
Pretrial Services Agency
for the District of Columbia

ADULT ARRESTEE PCP POSITIVE RATES
Pretrial Services Agency for the District of Columbia
Prepared by Office of Forensic Research
Jerome J. Robinson, Director
## Pretrial Services Agency

*for the District of Columbia*

### Drug Test Results – Adult Arrestees

**Year-End Data (1994-2014)**

<table>
<thead>
<tr>
<th>Year-Ended</th>
<th>Total No. Tested</th>
<th>Any Positive</th>
<th>Cocaine</th>
<th>Opiates</th>
<th>PCP</th>
<th>Amphetamines</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>19,151</td>
<td>9,408 or 48%</td>
<td>7,880 or 41%</td>
<td>1,865 or 10%</td>
<td>2,076 or 11%</td>
<td>Not reported */</td>
</tr>
<tr>
<td>1995</td>
<td>15,994</td>
<td>7,822 or 49%</td>
<td>6,229 or 40%</td>
<td>1,668 or 10%</td>
<td>942 or 5%</td>
<td>&quot;</td>
</tr>
<tr>
<td>1996</td>
<td>18,292</td>
<td>8,319 or 46%</td>
<td>7,420 or 41%</td>
<td>1,912 or 11%</td>
<td>942 or 5%</td>
<td>&quot;</td>
</tr>
<tr>
<td>1997</td>
<td>19,393</td>
<td>8,583 or 44%</td>
<td>7,569 or 39%</td>
<td>2,160 or 11%</td>
<td>862 or 4%</td>
<td>&quot;</td>
</tr>
<tr>
<td>1998</td>
<td>17,336</td>
<td>7,605 or 44%</td>
<td>7,461 or 43%</td>
<td>1,885 or 11%</td>
<td>409 or 2%</td>
<td>&quot;</td>
</tr>
<tr>
<td>1999</td>
<td>15,270</td>
<td>7,034 or 46%</td>
<td>5,978 or 39%</td>
<td>1,808 or 12%</td>
<td>907 or 6%</td>
<td>&quot;</td>
</tr>
<tr>
<td>2000</td>
<td>15,630</td>
<td>6,750 or 43%</td>
<td>5,255 or 34%</td>
<td>1,492 or 10%</td>
<td>1,448 or 9%</td>
<td>&quot;</td>
</tr>
<tr>
<td>2001</td>
<td>17,350</td>
<td>8,005 or 46%</td>
<td>5,930 or 34%</td>
<td>1,820 or 10%</td>
<td>2,199 or 13%</td>
<td>&quot;</td>
</tr>
<tr>
<td>2002</td>
<td>17,952</td>
<td>8,618 or 48%</td>
<td>6,312 or 35%</td>
<td>1,883 or 10%</td>
<td>2,542 or 14%</td>
<td>&quot;</td>
</tr>
<tr>
<td>2003</td>
<td>17,616</td>
<td>8,307 or 47%</td>
<td>6,124 or 35%</td>
<td>1,741 or 10%</td>
<td>2,343 or 13%</td>
<td>&quot;</td>
</tr>
<tr>
<td>2004</td>
<td>19,531</td>
<td>8,499 or 44%</td>
<td>7,154 or 37%</td>
<td>1,906 or 10%</td>
<td>1,220 or 6%</td>
<td>&quot;</td>
</tr>
<tr>
<td>2005</td>
<td>19,867</td>
<td>8,887 or 45%</td>
<td>7,419 or 37%</td>
<td>1,850 or 9%</td>
<td>1,496 or 8%</td>
<td>&quot;</td>
</tr>
<tr>
<td>2006</td>
<td>23,271</td>
<td>11,372 or 49%</td>
<td>9,325 or 40%</td>
<td>2,079 or 9%</td>
<td>2,138 or 9%</td>
<td>283 or 3% */</td>
</tr>
<tr>
<td>2007</td>
<td>22,800</td>
<td>10,990 or 48%</td>
<td>8,486 or 37%</td>
<td>2,073 or 9%</td>
<td>2,132 or 9%</td>
<td>834 or 4%</td>
</tr>
<tr>
<td>2008</td>
<td>24,375</td>
<td>10,836 or 44%</td>
<td>8,044 or 33%</td>
<td>2,341 or 10%</td>
<td>2,443 or 10%</td>
<td>500 or 2%</td>
</tr>
<tr>
<td>2009</td>
<td>22,319</td>
<td>8,910 or 40%</td>
<td>6,403 or 29%</td>
<td>2,055 or 9%</td>
<td>1,979 or 9%</td>
<td>254 or 1%</td>
</tr>
<tr>
<td>2010</td>
<td>20,517</td>
<td>7,547 or 37%</td>
<td>5,086 or 25%</td>
<td>1,778 or 9%</td>
<td>1,994 or 10%</td>
<td>195 or 1%</td>
</tr>
<tr>
<td>2011</td>
<td>18,353</td>
<td>6,380 or 35%</td>
<td>3,939 or 21%</td>
<td>1,441 or 8%</td>
<td>1,935 or 11%</td>
<td>194 or 1%</td>
</tr>
<tr>
<td>2012</td>
<td>16,281</td>
<td>4,761 or 29%</td>
<td>2,619 or 16%</td>
<td>1,147 or 7%</td>
<td>1,629 or 10%</td>
<td>163 or 1%</td>
</tr>
<tr>
<td>2013</td>
<td>16,621</td>
<td>4,688 or 28%</td>
<td>2,375 or 14%</td>
<td>1,202 or 7%</td>
<td>1,656 or 10%</td>
<td>189 or 1%</td>
</tr>
<tr>
<td>2014</td>
<td>18,643</td>
<td>4,965 or 27%</td>
<td>2,427 or 13%</td>
<td>1,366 or 7%</td>
<td>1,810 or 10%</td>
<td>194 or 1%</td>
</tr>
</tbody>
</table>

*/ The Pretrial Services Agency resumed reporting on amphetamines in August 2006.*
Synthetic Cannabinoid Testing Results for August 2015*

<table>
<thead>
<tr>
<th></th>
<th>August 2015</th>
<th>Percentage of total samples</th>
<th>Percentage of Positive Samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positives</td>
<td>99</td>
<td>49%</td>
<td>11%</td>
</tr>
<tr>
<td>Negatives</td>
<td>103</td>
<td>51%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>204</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Metabolites</th>
<th>Number of Positives</th>
<th>Percentage of total samples</th>
<th>Percentage of Positive Samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB Pinaca Metabolites</td>
<td>19</td>
<td>9%</td>
<td>11%</td>
</tr>
<tr>
<td>UR-144 Metabolites</td>
<td>97</td>
<td>48%</td>
<td>54%</td>
</tr>
<tr>
<td>BB-22 Metabolite</td>
<td>5</td>
<td>2%</td>
<td>3%</td>
</tr>
<tr>
<td>5FPP22 Metabolite</td>
<td>52</td>
<td>25%</td>
<td>29%</td>
</tr>
<tr>
<td>XLR Metabolite</td>
<td>3</td>
<td>1.5%</td>
<td>2%</td>
</tr>
<tr>
<td>PB-22 Metabolite</td>
<td>2</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>5F AB Pinaca Metabolite</td>
<td>1</td>
<td>.5%</td>
<td>.6%</td>
</tr>
<tr>
<td>AB Adbica Metabolite</td>
<td>1</td>
<td>.5%</td>
<td>.6%</td>
</tr>
</tbody>
</table>

* These samples were obtained from the pretrial, parole/probation, and juvenile populations. The samples have been preselected by staff or the court for testing due to suspected use by the contributor.
RESULTS OF A LIMITED STUDY OF DRUG USAGE BY PERSONS ARRESTED FOR A VIOLENT CRIME

PSA conducted a study of drug usage by violent crime arrestees for the period between July 6, 2015, and July 24, 2015. A total of 136 samples were collected during this time period (not every arrestee provided a sample).

Of these, 95 (70%) were positive for one or more substances (including marijuana) and 41 (30%) were negative for all tested substances.

Samples are collected from arrestees the morning of their first appearance in court. PSA has no way of ascertaining the amount of time between the alleged offense and the collection of the sample (e.g., if based on a warrant, an arrest may occur several days or more after the offense).

<table>
<thead>
<tr>
<th>Arrest Charge</th>
<th>Number of Samples Tested</th>
<th>Positive for Synthetic Cannabinoids</th>
<th>Positive for Any Drug</th>
<th>Non-Synthetic Cannabinoid Positives</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>%</td>
<td>#</td>
<td>%</td>
</tr>
<tr>
<td>Assault w Dangerous Weapon</td>
<td>55</td>
<td>18%</td>
<td>10</td>
<td>65%</td>
</tr>
<tr>
<td>Robbery</td>
<td>25</td>
<td>36%</td>
<td>9</td>
<td>80%</td>
</tr>
<tr>
<td>Aggravated Assault</td>
<td>15</td>
<td>13%</td>
<td>2</td>
<td>67%</td>
</tr>
<tr>
<td>Sex Abuse</td>
<td>14</td>
<td>7%</td>
<td>1</td>
<td>64%</td>
</tr>
<tr>
<td>APO (felony)</td>
<td>9</td>
<td>44%</td>
<td>4</td>
<td>67%</td>
</tr>
<tr>
<td>Burglary</td>
<td>9</td>
<td>11%</td>
<td>1</td>
<td>89%</td>
</tr>
<tr>
<td>Murder</td>
<td>6</td>
<td>-</td>
<td>0</td>
<td>67%</td>
</tr>
<tr>
<td>Assault with Intent to Kill</td>
<td>3</td>
<td>-</td>
<td>0</td>
<td>67%</td>
</tr>
<tr>
<td>Total</td>
<td>136</td>
<td>20%</td>
<td>27</td>
<td>70%</td>
</tr>
</tbody>
</table>

"Arrest Charge" – this combines sub-categories (e.g., ADW gun/knife/other, etc.).
OFFICE OF THE CHIEF MEDICAL EXAMINER
WASHINGTON DC

SYNTHETIC CANNABINOIDS
SEPTEMBER 2015
Mission

• To provide vision and leadership for Medicolegal Death Investigation & Forensic Toxicology for the District of Columbia

• To achieve/maintain excellent Forensic Service, Education and Research
  – Investigation, Response, and Report Cause & Manner of Death
  – DUI, DFSA, and Breath Program
  – Expert Witness Testimony
  – Education and Training of law enforcement and health care providers

• To provide Family Assistance in understanding cause and manner of death

• To support District and Federal Law Enforcement and Public Health related initiatives (i.e. Violence, Drug Abuse, Natural Disease)
  – Surveillance: Identification of emerging public health/law enforcement trends
    • Example: Synthetic Cannabinoids
  – DUI, DFSA, and Breath Program

• To provide leadership for the management of Mass Fatality Operations & Preparedness
Current Practices in US

- **Coroner/JP**
  - Elected official
  - No training or MD degree

- **Medical Examiner**
  - Appointed
  - MD degree
Endocannabinoid System

Cannabinoid Full Receptor Agonists

- CB1 present: brain, lungs, vascular system, muscles, gastrointestinal tract, reproductive organs
- CB2 present: spleen, bones, skin
- CB1+CB2 present: immune system, liver, bone marrow, pancreas

4-5X Binding Affinity to CB1

Cannabinoid and Synthetic cannabinoids

Phytocannabinoids

Presynaptic (sending neuron)

Postsynaptic (receiving neuron)

Endocannabinoid
Synthetic Cannabinoid Testing

• Liquid Chromatography tandem Mass Spectrometry (LC-MS/MS).
  – Mass charge ratio (m/z) of charged particles
  – Liquid phase to gas phase (electrospray)
  – Ionization (positive mode)
  – Separation based upon m/z
  – Detection
Synthetic Cannabinoid Testing

Peptide Selection (MS1) → Fragmentation → Fragment Selection (MS2)

MRM Signal vs. Time

Counts (%) vs. Acquisition Time (ms)
Synthetic Cannabinoid Testing

Barriers

• Extensively metabolized
• Highly lipophilic
• Primarily metabolites are found in the urine.
• Optimal metabolite targets remain unknown
• Definitive identification is complicated by converging metabolic pathways.
• Little is known about metabolite stability in storage conditions
• Lack of knowledge surrounding the metabolism on new compounds
## Synthetic Cannabinoid Testing
### Urine Metabolites

<table>
<thead>
<tr>
<th>Metabolite</th>
<th>Urine Metabolite</th>
<th>Cannabinoid</th>
<th>Metabolite</th>
<th>Cannabinoid</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-fluoro AKB48 N-(4-hydroxypentyl)</td>
<td>AKB48 N-pentanoic acid</td>
<td>JWH 250 N-(4-hydroxypentyl)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-fluoro PB-22 3-carboxyindole</td>
<td>AM2201 N-(4-hydroxypentyl)</td>
<td>MAM2201 N-pentanoic acid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AB-CHMINACA M2</td>
<td>AM694 N-pentanoic acid</td>
<td>PB-22 3-carboxyindole</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AB-CHMINACA M4</td>
<td>BB-22 3-carboxyindole</td>
<td>PB-22 N-pentanoic acid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AB-CHMINACA M6</td>
<td>JWH 018 4-hydroxyindole</td>
<td>THC (l)-9-carboxy-11-nor-delta-9-THC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AB-FUBINACA 2B</td>
<td>JWH 018 N-(5-hydroxypentyl)</td>
<td>UR-144 Degradant N-pentanoic acid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AB-PINACA N-(4-hydroxypentyl)</td>
<td>JWH 018 N-pentanoic acid</td>
<td>UR-144 N-(5-hydroxypentyl)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AB-PINACA pentanoic acid</td>
<td>JWH 019 N-(6-hydroxyhexyl)</td>
<td>UR-144 N-pentanoic acid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADBICA N-pentanoic acid</td>
<td>JWH 073 N-(4-hydroxybutyl)</td>
<td>XLR11 6-hydroxyindole</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADB-PINACA pentanoic acid</td>
<td>JWH 073 N-butanoic acid</td>
<td>XLR11 Degradant</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>JWH 122 N-(5-hydroxypentyl)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JWH 073 N-(3-hydroxybutyl) -d5</td>
<td></td>
<td>UR-144 N-pentanoic acid -d5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Emergency Rulemaking
Synthetic Cannabinoids
Recommendations

• **Maintain Comprehensive Testing**
  – Human Patient Samples
    • Driving Under the Influence
    • Pre-Trial Services
    • Emergency Department
    • Post-Mortem
  – Chemistry Toxicology
    • Packaged Retail
    • Search/Seizure

• **Method Development**
• **Promote Basic Scientific Research**
roger.mitchell@dc.gov
202-698-9001

ROGER A MITCHELL, JR. MD FASCP
Understanding the Impact:
Health Responses to Synthetic Drugs
Understanding the Impact:
Health Responses to Synthetic Drugs

LaQuandra S. Nesbitt, MD, MPH
Director
DC Department of Health
September 16, 2015
Session Objectives

• Learn about the medical, public, and behavioral health responses to synthetic drugs
• Explore leveraging existing health response strategies in the synthetic drugs context
Critical Public Health Questions

• What is the prevalence of synthetic cannabinoid use?
• Are individuals suspected of using synthetic cannabinoids actually using these substances?
• Are synthetic cannabinoids being used alone or in combination with other illicit drugs?
• What are the demographic characteristics of synthetic cannabinoid users?
Emergency Rulemaking

• Requires hospitals to collect urine samples from patients who present and have symptoms consistent with having taken a synthetic cannabinoid;

• Recommends that hospitals collect blood samples from patients who present and have symptoms consistent with having taken a synthetic cannabinoid;

• Requires that the urine and blood samples be stored in accordance with protocols provided by the Department of Health; and

• Requires that the hospitals turn over the urine and blood samples for testing by the Office of the Chief Medical Examiner.
Information Collected

- Name (unique identifier created by OCME)
- Date of birth
- Observed race
- Observed gender
- Hospital name or hospital number
- Medical record number
Blood Compounds

- 5F-AB-001
- 5F-ADB-PINACA
- 5F-ADBICA
- 5F-APICA
- 5F-APINACA (5F-AKB-48)
- 5F-MN-18
- 5F-PB-22
- AB-CHMINACA
- AB-FUBINACA
- AB-PINACA
- ADB-CHMINACA
- ADB-FUBINACA
- ADB-PINACA
- ADBICA
- AM-2201
- APICA
- APINACA (AKB-48)

- BB-22
- FUB-AKB-48
- FUB-PB-22
- FUBIMINA
- JWH-018
- JWH-081
- JWH-122
- JWH-210
- MDMB-CHMINACA
- MN-18
- MN-25
- PB-22
- THJ-018
- THJ-2201
- UR-144
- XLR-11
Urine Metabolites

- 5-fluoro AKB48 N-(4-hydroxypentyl)
- 5-fluoro PB-22 3-carboxyindole
- AB-CHMINACA M2
- AB-CHMINACA M4
- AB-CHMINACA M6
- AB-PINACA N-(4-hydroxypentyl)
- AB-PINACA pentanoic acid
- ADBICA N-pentanoic acid
- ADB-PINACA pentanoic acid
- AKB48 N-pentanoic acid
- AM2201 N-(4-hydroxypentyl)
- AM694 N-pentanoic acid
- BB-22 3-carboxyindole
- JWH 018 4-hydroxyindole
- JWH 018 N-(5-hydroxypentyl)
- JWH 018 N-pentanoic acid
- JWH 019 N-(6-hydroxyhexyl)
- JWH 073 N-(4-hydroxybutyl)
- JWH 073 N-butanoic acid
- JWH 122 N-(5-hydroxypentyl)
- JWH 250 N-(4-hydroxypentyl)
- MAM2201 N-pentanoic acid
- PB-22 3-carboxyindole
- PB-22 N-pentanoic acid
- THC (l)-9-carboxy-11-nor-delta-9-THC
- UR-144 Degradant N-pentanoic acid
- UR-144 N-(5-hydroxypentyl)
- UR-144 N-pentanoic acid
- UR-144 N-pentanoic acid -d5
- XLR11 6-hydroxyindole
- XLR11 Degradant
Highlights from Screening

• 196 individuals have been screened; however, results are available for 96 of those individuals as of 8/28/2015

• 77 of those screened, had a positive drug screen
  – 57 were positive for synthetic cannabinoids
Highlights from Screening

• 3 out of 4 individuals who screened positive were male

• The average age was 36.2 years of age
  – The age range is 18 to 65 years of age

• 84% of individuals who screened positive were black
  – Race/ethnicity date was reported as unknown for 8 of the 57 individuals who screened positive
Highlights from Screening

Overall Drug Use Patterns in Patients Testing Positive for either Synthetic Cannabinoids or Other Illicit Drugs (n=77)

- Drug Only: 34%
- Synthetic only: 26%
- Both: 40%
Highlights from Screening

Synthetic Drug Compounds Detected in Positive Samples (n=57)

- 5-fluoro-PB-22: 32
- AB-Chminaca: 5
- AB-Chminaca 3 methyl: 20
- AB-Fubinaca: 1
- AB-PINACA N-prop: 6
- ADB-Chminaca: 4
- FUB-PBP-22: 8
- PB-22 3-carboxyindol: 2
- UR-144 N-pentanoic acid: 20
- UR-144 degradant N-pentanoic acid: 19
- UR-144 glucuronide: 2

# of Individuals Tested Positive

Synthetic Drug Compounds Detected
Highlights from Screening

Number of Synthetic Compounds Detected

- 6 compounds detected: 3.5%
- 5 compounds detected: 1.8%
- 4 compounds detected: 8.8%
- 3 compounds detected: 17.5%
- 2 compounds detected: 26.3%
- 1 compound detected: 42.1%
Highlights from Screening

Other Drugs Detected in Combination with Synthetic Drugs (n=31)

- Cocaine: 10
- Codeine: 1
- Hydrocodeine: 1
- Methamphetamine: 0
- Morphine: 1
- Opiates: 2
- PCP: 10
- THC: 24
- GMAM: 0
- Non-Synthetic Drugs Found
- Benzodiazepines: 0
- Amphetamine: 1

# of Individuals Tested Positive
Highlights from Screening

Positive tests for each drug for patients testing positive for only non-synthetic drugs (n=20)
Does the clinical presentation vary depending on the compound?

Are individuals with a history of substance abuse using synthetic cannabinoids only when their substance of choice is not available?

How do first responders assess/treat potential users given the varying clinical presentation?

What is the addiction potential and tolerance for synthetic cannabinoids?

How does the lack of regulation of synthetic cannabinoids contribute to their toxicity and adverse health effects/concerns?
Contact Info

LaQuandra S. Nesbitt, MD, MPH
laquandra.nesbitt@dc.gov

@DrL Nesbitt
American Association of Poison Control Centers

Poison Control Center Data on Synthetic Cannabinoids

Presented by Stephen Kaminski
AAPCC CEO and Executive Director
American Association of Poison Control Centers

- AAPCC represents the nation’s 55 poison control centers (PCCs).
- PCCs provide free, expert information and treatment advice, 24x7x365 via the Poison Help line.
- Calls are answered by specialists in poison information (e.g., nurses, toxicologists, pharmacists, and physicians).
- PCCs receive approximately 3.1M calls annually.
National Poison Data System (NPDS)

- All 55 PCCs use electronic health record collection systems with common data elements & reporting requirements. Data is collected real-time as cases are being managed.
- PCCs upload case data to NPDS every eight minutes, providing a near real-time snapshot of poisoning conditions nationwide.
- NPDS is designed to detect poison exposure outbreaks by automatically applying analysis algorithms to analyze call volume and clinical effect trends.
- NPDS contains more than 60 million case records dating back to 1983 and product-specific data about more than 400,000 products.
Synthetic Cannabinoids

- With names like K2 and Spice, synthetic cannabinoids are often referred to as “synthetic marijuana.” However, they are actually quite different from marijuana.
- Synthetic cannabinoids contain powerful chemicals which can cause:
  - Intense hallucinations, psychotic episodes & seizures.
  - Severe agitation & anxiety.
  - Fast, racing heartbeat & higher blood pressure.
  - Nausea & vomiting.
  - Suicidal and other harmful thoughts and/or actions.
## 2010–2015 NPDS Exposure Data

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>2,906</td>
</tr>
<tr>
<td>2011</td>
<td>6,968</td>
</tr>
<tr>
<td>2012</td>
<td>5,230</td>
</tr>
<tr>
<td>2013</td>
<td>2,668</td>
</tr>
<tr>
<td>2014</td>
<td>3,682</td>
</tr>
<tr>
<td><strong>2015</strong></td>
<td><strong>5,652</strong></td>
</tr>
<tr>
<td><em>(though 8–30–15)</em></td>
<td></td>
</tr>
</tbody>
</table>

*2015 numbers may change as cases are closed and additional information is received.*
Synthetic Cannabinoid Exposures 2010–2015

Note: 2015 Data is current through Aug. 31
### Synthetic Cannabinoid Exposures 2015

<table>
<thead>
<tr>
<th>Month</th>
<th>Number of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>358</td>
</tr>
<tr>
<td>February</td>
<td>273</td>
</tr>
<tr>
<td>March</td>
<td>269</td>
</tr>
<tr>
<td>April</td>
<td>1,512</td>
</tr>
<tr>
<td>May</td>
<td>1,209</td>
</tr>
<tr>
<td>June</td>
<td>649</td>
</tr>
<tr>
<td>July</td>
<td>697</td>
</tr>
<tr>
<td>August</td>
<td>685</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>5,652</strong></td>
</tr>
</tbody>
</table>

**Note:** Data is current through Aug. 31
Synthetic Cannabinoid Calls to U.S. Poison Centers (1/1/15-8/30/15)

PLEASE NOTE:
• These data are only representative of calls received by the poison centers and may not reflect the actual severity of the problem in the U.S. or any specific geographic location.
• As there is no mandatory reporting, there may be emergency room presentations and hospital admissions of which poison centers are unaware.
• Subject to the above bullets, these numbers are largely reflective of those users/abusers who have experienced adverse effects from the use of these products significant enough to warrant poison center or other health professional intervention; not all individuals who use/abuse such products call poison centers or visit emergency rooms.
• Nevertheless, the data are a good surrogate marker for rising use/abuse patterns and patterns of adverse medical outcomes associated with their use.
• For more information about the American Association of Poison Control Centers (AAPCC) data, please visit: http://www.aapcc.org/data-system/
### States with Highest Synthetic Cannabinoids Exposure Rates

8% of all U.S. Cases Received from DC/MD/VA

<table>
<thead>
<tr>
<th>Rank</th>
<th>State</th>
<th>2015 Cumulative Calls (per $10^5$ Population)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mississippi</td>
<td>44.3</td>
</tr>
<tr>
<td>2</td>
<td>Washington, D.C.</td>
<td>8.1</td>
</tr>
<tr>
<td>3</td>
<td>New York</td>
<td>6.3</td>
</tr>
<tr>
<td>4</td>
<td>Maryland</td>
<td>4.0</td>
</tr>
<tr>
<td>5</td>
<td>West Virginia</td>
<td>3.5</td>
</tr>
<tr>
<td>6</td>
<td>Alabama</td>
<td>2.6</td>
</tr>
<tr>
<td>7</td>
<td>Arkansas</td>
<td>2.6</td>
</tr>
<tr>
<td>8</td>
<td>Arizona</td>
<td>2.4</td>
</tr>
<tr>
<td>9</td>
<td>Virginia</td>
<td>2.3</td>
</tr>
<tr>
<td>10</td>
<td>Pennsylvania / Minnesota</td>
<td>2.1</td>
</tr>
</tbody>
</table>

*Note: Data is current through Aug. 31*
Understanding the Impact: Behavioral Health’s Responses to Synthetic Drugs

Tanya A. Royster, M.D., Acting Director
District of Columbia Department of Behavioral Health

September 16, 2015
Synthetic Drugs
Behavioral Health Implications

• Not a Single Substance

• Multiple combinations of chemicals

• Mind-altering chemicals are constantly evolving

• Active ingredients are changing

• Not for Human Consumption
Synthetic Drugs
Behavioral Health Implications

- Can cause extreme anxiety, paranoia, panic attacks, psychotic episodes, hallucinations, aggression, violence and even death

- Can cause rapid heart rate, vomiting, agitation, confusion, tremors, seizures and overdoses

- Long term effects on the body and mental health are not yet known
Synthetic Drugs
Treatment Challenges

• Many of the synthetic agents are potent hallucinogens

• Consumers can not tell what chemicals are in it so they can’t predict the effects

• No way to know how many unsafe chemicals are in a package

• Batches can contain multiple ingredients which may be much more toxic when taken together
Department of Behavioral Health Treatment Response

- Limited treatment protocols specific to synthetic drugs exist
- Increased access to assessment and treatment
- Does not focus on the substance but the condition of the affected person
- Support physical care first
- Provide addiction treatment services
Department of Behavioral Health
Overall Strategy

• Provide treatment to affected individuals as they present

• Increase public awareness of the dangers of synthetic

• Prevention for youth engaging in the drug given the characteristics
Department of Behavioral Health
Youth Prevention Efforts

• K2 Zombie Campaign launched in 2013 to raise awareness among youth ages 12 to 16 and their key influencers

• Campaign used print, outdoor advertising, mobile billboards, guerilla marketing, website and social media

• Community Conversations and local action commitments facilitated by the DBH funded DC Prevention Centers
Department of Behavioral Health
Youth Prevention Outcomes

• Online surveys with youth and parents
  – 92% had seen or heard the message about the dangers of synthetic drugs
  – 88% said they were not at all likely to purchase or use synthetic drugs in the next 90 days
  – 83% said synthetic drugs should not be used by anyone their age
Department of Behavioral Health
Youth Prevention Outcomes

• Online surveys with youth and parents
  – 75 % said friends would disapprove if they used synthetic drugs
  – Parents (29%) and youth (26%) were unsure if synthetics were less harmful

• Campaign has received 9 national advertising and public relations awards
National Recovery Month

Visible, Vocal, Valuable
Department of Behavioral Health Supports Recovery

• Drug addiction is a disease that can be treated
• Call the Access Helpline at 1-888-793-4357 any time day or night, seven days a week
• Visit the Assessment and Referral Center for same day service at:
  75 P St, NE Washington, DC 20002
  202-727-8473
  DBH.DC.Gov
  K2ZombieDC.com
Impact of Synthetic Cannabinoid Use on the DC EMS System

Rafael Sa’adah
Acting Deputy Fire Chief
District of Columbia Fire & EMS Department
September 16, 2015
District of Columbia Fire and Emergency Medical Services Department
Synthetic Cannabinoid ("K2" and "Spice") Patient Transports - 8/1/2012 to 8/31/2015

Day in Evaluation Period

Number of Patient Transports

5/18/2014 6
5/19/2015 15
6/12/2015 24
7/31/2015 25
8/14/2015 34
An analysis of suspected K2 patients encountered by EMS during month of June 2015 shows an age range of 14 to 76 (average 39, median 37); 17% female, 83% male. Patients are found in all four quadrants of the city, with clusters around homeless shelters.

Wide variance in presentation and severity of symptoms; findings have included: unconscious; unresponsive; seizure-like activity; unable to walk; altered mental status (decreased level of consciousness); combative; violent; aggressive; low heart rate. K2 patients require significant resources to manage, both during transport and in the hospital ED.

Total DC EMS transport volume for April 1, 2015 through August 31, 2015 was 50,602 (about 331 transports per day). K2 transports (1,759) represent approximately 3.5% of all EMS transports over the past five months. During August 2015, K2 transports comprised 5.7% of all EMS transports.

**District of Columbia Fire and EMS Department**

Synthetic Cannabinoid ("K2" and "Spice") Patient Cases and Transports - **Summary Data** (4/1/2015 to 8/31/2015)

<table>
<thead>
<tr>
<th>Month</th>
<th>Total Cases</th>
<th>Total Transports</th>
<th>AVG Transports/Day</th>
<th>LOW Transports/Day</th>
<th>HIGH Transports/Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>April</td>
<td>108</td>
<td>105</td>
<td>4</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>May</td>
<td>210</td>
<td>204</td>
<td>7</td>
<td>1</td>
<td>15</td>
</tr>
<tr>
<td>June</td>
<td>439</td>
<td>437</td>
<td>15</td>
<td>3</td>
<td>24</td>
</tr>
<tr>
<td>July</td>
<td>413</td>
<td>410</td>
<td>13</td>
<td>3</td>
<td>25</td>
</tr>
<tr>
<td>August</td>
<td>608</td>
<td>603</td>
<td>19</td>
<td>11</td>
<td>34</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1,778</td>
<td>1,759</td>
<td>11</td>
<td>0</td>
<td>34</td>
</tr>
</tbody>
</table>
K2 Transports versus all other EMS transports: 2014—2015
Current DC EMS System Initiatives to Address Synthetic Cannabinoid Use Include:

- Operational monitoring of geographic and temporal overdose clusters
  - If two or more patients in close geographic proximity within one hour, trigger operational notifications and consider multiple/mass-casualty incident management response
  - Distribute suspected K2 patients across all appropriate hospital ED’s to mitigate operational impact; pre-notify for surges, clusters and combative patients when possible
- Twice-daily reporting of suspected K2 transport statistics to the DC Department of Health (DOH) and the WRTAC (Fusion Center) public health desk
- Longitudinal analysis and reporting of responses and transports to internal DC government stakeholders; participation in multi-agency/cross-cluster working groups
- Active engagement with DC hospitals through monthly ED leaders meeting
- Work with the DC DOH Epidemiology Division to enable access to raw data and create analytical partnership
Synthetic Cannabinoids

Metropolitan Police Department
The Narcotics and Special Investigations Division conducts criminal enforcement operations related to synthetic cannabinoids.

This includes various enforcement strategies such as street level enforcement, store inspections, and investigations.
Legislation

- In July 2015 Mayor Bowser signed legislation allowing MPDC and DCRA to close a business for up to 96 hours and issue a fine of $10,000 for the first offense where they are found to be selling synthetic cannabinoids.

- A second offense can lead to closing the business for up to 30 days and a fine of $20,000.
Street Level Enforcement

- NSID conducts operations aimed at locating individuals selling synthetic cannabinoids on the street.
- Typically these individuals sell single cigarettes containing synthetics.
- The unit has made 83 arrests for distribution of synthetics since June 2015.
Stores

- NSID conducts compliance checks of businesses to disrupt the sale of synthetic cannabinoids
- 51 stores have been inspected in 2015
- NSID conducts many of these inspections in cooperation with DCRA
Investigations

- NSID conducts investigations involving the trafficking of synthetic cannabinoid products into Washington, DC
- These investigations are conducted in cooperation with federal law enforcement, surrounding local and state agencies, and the US Postal Service
Large Seizure of Bizarro
Intended for a DC Businesses

- 116 kilo seizure on September 1, 2015
- Over 19,000 Bizarro packets
- All intended for stores and for individual street sales in Washington, DC
Bizarro Packest
Synthetic Drugs
Liquid Form

- E-cigarettes can be used to ingest synthetic cannabinoid analogs
- Liquid Bizarro bottle
Concealment Methods

- Synthetic cannabinoids hidden in candy boxes and Slim Jim boxes under a store counter
Concealment
Synthetic Cannabinoids

Side Effects

- Side effects associated with synthetic cannabinoids include:
  - Uncertain “high”
  - Hallucinations
  - Seizures/tremors
  - Unconsciousness/coma
  - Vomiting
Synthetic Cannabinoids

Side Effects

- Numbness/Tingling
- Increased Respiration Rate
- Elevated Blood Pressure
- Anxiety/Agitation that may lead to Panic Attacks
- The long term side effects of synthetic marijuana are not known because no human tests have been conducted and the products are relatively new.
A Law Enforcement Perspective on Synthetic Drugs

Presented By: Lieutenant Quintin O. Kelly
Virginia State Police
Virginia State Police Division Map
Operation Zombieland Express

- Synthetic Drug Trafficking Organizations (SDTOs)
- Retail Establishments in Hampton Roads VA
- Smokeable Synthetic Cannabinoid a/k/a "Spice"
- Synthetic Cathionone a/k/a Bath Salts
- Users were like Zombies
- Spanned 50 States and 3 Countries
- 50 people in 4 States arrested
Operation Zombieland Express

- 19 Vehicles seized
- 1 Sailboat
- $2 million in U.S. Currency
- $80,000 in Gold Bullion
- 500 pounds of various Synthetic Drugs
- 5,000 pieces of drug paraphernalia
- Over 100 Undercover Buys at Retail level
- Classic Money Laundering Investigation
Operation Zombieland Express

- With drug undertones
- Money moved through a variety businesses
- Used to buy real estate, vacations, various luxury items
- Analogue Enforcement Act of 1986
Andy Fox reporting on a drug bust in Norfolk

https://youtu.be/oNAvtgsRyW8
The Southwest VA Drug Task Force

• The Pound and Coeburn area (Wise County) have become a source area for a lot of the synthetics sold in the region.

• The dealers have established a relationship with a chemical company in China who ships the compound used to spray the dried plant material.
The Southwest VA Drug Task Force

• Buys the chemical and plant material & sprays the chemical on the plant material.
• The profit margin is ridiculously high and a lot of the compounds are not scheduled. ($15 to $25 gram).
COEBURN, Va. - There's a new reminder of the dangers involving synthetic drug use. Over a 12-hour period in late December, Wise County emergency responders and the sheriffs department answered six drug overdose cases involving synthetics, all in the Coeburn area. There have been no deaths related to these cases.
Cops: Synthetic ‘pot’ maker used Fauquier storage unit

• Amount of precursor materials seized estimated street value $1.1 million
• Product manufactured shipped nationally via postal service
• Multi-State Distribution Network
Virginia State Police
Bureau of Criminal Investigations
Lieutenant Quintin O. Kelly

703-803-2634 (Office)
571-283-1974 (Cell)
Moving Forward Together:
Developing a Comprehensive Regional Synthetic Drug Response Strategy
Addressing the Challenges of Synthetic Drug Use and Abuse in Virginia

Victoria Cochran
Deputy Secretary of Public Safety & Homeland Security
Approaches

Legislation to Control Compounds

Data Sharing

Other information
Legislative History in Virginia

**2011** – First five synthetic cannabinoids controlled with penalties mimicking those for marijuana

**2012** – Compounds and structural classes added

**2013** – Add’l compounds and more structural classes added
Virginia Legislation in 2014

Raised penalties for distribution or sale of cannabimimetic agents equivalent to Schedule I drugs (§ 54.1-3446 (7))

Replaced “Designer Drug” statute with one more closely resembling Federal Analogue Act (§54.1-3401 and § 54.1-3456)

Created an emergency, temporary scheduling mechanism for the Board of Pharmacy exempted from much of the regulatory process
Temporary Scheduling

Authorizes the Board of Pharmacy to amend its regulations via an expedited regulatory process to temporarily place substances into Schedule I or II (§ 2.2-4006 (13) and § 54.1-3443 (D))

- Permitted in instances where the Board has determined, in consultation with DFS, that the substances should be so scheduled
- The Board must conduct a public hearing, giving at least 30 days notice that provides a list of substances it intends to schedule
- The Board must notify the House and Senate Courts of Justice Committees of any new substance added to Schedule I or II by this expedited regulatory process
- Any substances added will remain on Schedule I or II for 18 months and then be de-scheduled unless a general law is enacted adding such substance to Schedule I or II
OFFICE OF THE SECRETARY OF
PUBLIC SAFETY AND HOMELAND SECURITY

Board of Pharmacy Action – Schedule I by Regulation on February 22, 2015

1. N-(1-amino-3-methyl-1-oxobutan-2-yl)-1-(cyclohexylmethyl)indazole-3-carboxamide (other name: AB-CHMINACA)

2. N-(1-amino-3-methyl-1-oxobutan-2-yl)-1-(5-fluoropentyl)indazole-3-carboxamide (other name: 5-fluoro-AB-PINACA)

3. 3,4-methylenedioxy-N,N-dimethylcathinone (other names: Dimethylone, bk-MDDMA)

❖ All three added permanently through legislative action effective July 1, 2015
Board of Pharmacy Action

Placed in Schedule I by Regulation on August 12, 2015 and will remain in effect until February 11, 2017, unless enacted into law in the Drug Control Act.

Cannabimimetic agents:

- N-(1-amino-3,3-dimethyl-1-oxobutan-2-yl)-1-(cyclohexylmethyl)indazole-3-carboxamide (other names: ADB-CHMINACA, MAB-CHMINACA)
- methyl 2-(1-(5-fluoropentyl)-1H-indazole-3-carboxamido)-3-methylbutanoate (other name: 5-fluoro-AMB)
- 1-naphthalenyl-1-(5-fluoropentyl)-1H-indole-3-carboxylate (other name: NM-2201)
- 1-(4-fluorobenzyl)-3-(2,2,3,3-tetramethylcyclopropylmethanone)indole (other name: FUB-144)

Cathinone-type compounds:

- 4-bromomethcathinone (other name: 4-BMC)
- 4-chloromethcathinone (other name: 4-CMC)
Office of the Secretary of Public Safety and Homeland Security

Data Sharing

http://www.dfs.virginia.gov/documentation-publications/
Cannabimimetic Agent Submissions

Cases submitted to DFS, calendar years 2011-2014
Cannabimimetic Agent* Submission Rate
Rate of submissions per 100,000 Population, calendar years 2006-2014

[Bar chart showing submission rates per 100,000 population for each year (2011 and 2014) for different entities (VSP1 to VSP7 and State).]

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Governor’s Task Force on Prescription Drug and Heroin Abuse

Lessons learned:

• Data sharing
• Collaborative process between public health and public safety
• Education
Thank you!

Governor’s Prescription Drug and Heroin Abuse Task Force:

http://www.dhp.virginia.gov/taskforce/
Biographies & Acknowledgments
The Criminal Justice Coordinating Council for the District of Columbia’s Substance Abuse Treatment and Mental Health Services Integration Taskforce (SATMHSIT) would like to thank the Maryland Governor’s Office of Crime Control and Prevention and the Virginia Department of Criminal Justice Services for their partnership in pulling together this symposium.

We would also like to thank our distinguished panelists for sharing their insight and expertise on this important topic with us; leaders from the District, Maryland, and Virginia for recognizing the importance of collaborating to address this issue; and, especially, all of you for attending and participating in this symposium.

E. Erin Artigiani
Deputy Director of Policy
University of Maryland Center for Substance Abuse Research

Erin Artigiani received her Master’s Degree in Sociology from the University of California, Los Angeles, and a Bachelor’s Degree in Sociology & Psychology from Wellesley College and is now Deputy Director of Policy at the University of Maryland’s Center for Substance Abuse Research (CESAR). Ms. Artigiani has more than 17 years of experience in substance abuse research and policy development. Ms. Artigiani has managed a number of epidemiological workgroups for Maryland and Washington, DC, most recently as a part of the SAMHSA funded Strategic Prevention Framework (SPF) and Opioid Misuse Prevention Program (OMPP) Initiatives that utilize a multidisciplinary approach to conduct state and local level needs assessments, strategic plans, and evaluations of prevention strategies. She currently works closely with a local Maryland county coalition on the OMPP and as Co-Investigator for the National Drug Early Warning System (NDEWS) funded by NIDA. She is also currently working with BSU as an evaluator for their substance abuse and HIV prevention strategies and is Co-Investigator on both the Community Drug Early Warning System and the Maryland Community Services Locator projects. For 14 years, she represented Maryland and Washington, DC, on NIDA’s national Community Epidemiology Workgroup (CEWG).
Amy Billing  
Project Director MDCSL and CDEWS  
University of Maryland Center for Substance Abuse Research

Amy Billing, MSSA, earned her Master of Science in Social Administration at Case Western Reserve University, and attained her Bachelor of Arts in Health and Human Services from the State University of New York at Buffalo. She is currently the Project Director for the Maryland Community Services Locator (MDCSL) and the Community Drug Early Warning System (CDEWS) Projects at the Center for Substance Abuse Research (CESAR) at the University of Maryland, College Park. Formerly, she served as a Project Manager and researcher at the Public Health Informatics Research Laboratory at the University of Maryland, College Park. She has experience in managing large-scale research projects, program development and evaluation, as well as data collection and analysis.

Muriel Bowser  
Mayor of the District of Columbia

Sworn-in on January 2, 2015, as the District’s seventh elected mayor, Mayor Muriel Bowser has made significant contributions to create economic opportunity throughout the District. Bowser has expanded the Summer Youth Employment Program to include residents ages 22 through 24, which added 1,000 jobs for youth for 2015; extended Kids Ride Free to Metro Rail, making it easy for students to get to and from school; added $100 million in the Housing Production Trust Fund to expand affordable housing opportunities; and made historic investments to end homelessness.

With a keen focus on engaging residents and harnessing fresh ideas, Mayor Bowser kicked off her first budget with a series of budget engagement forums to obtain their input on the front end. With residents’ feedback in hand, Mayor Bowser closed a nearly $200 million budget gap while investing in programs that expand opportunity for residents. The Mayor’s budget for Fiscal Year 2016 — which begins on October 1 — supports enhanced public safety, accelerates the pace of education reform, and improves the District’s vibrant neighborhoods and the environment. In addition, Mayor Bowser is committed to maintaining the District as a hub for innovation, increasing the District government’s response to the needs of residents.

Prior to her time as Mayor, Bowser served as the Ward 4 councilmember of the DC Council — first elected in a special election in 2007, and re-elected in 2008 and 2012. As a Councilmember, Bowser served as the Chairwoman of the Committee on Economic Development which created more than 5,000 units of affordable housing, passed legislation to build a new soccer stadium and secured from the federal government the best portion of the Walter Reed campus for DC Bowser led her colleagues to pass comprehensive ethics reform and increased transparency in government contracting.

Bowser also served as an Advisory Neighborhood Commissioner in the Riggs Park neighborhood. A native Washingtonian, Bowser earned a Bachelor of Arts degree in History from Chatham College and a Master’s degree in Public Policy from American University.
Mannone Butler  
Executive Director  
Criminal Justice Coordinating Council for the District of Columbia

Mannone A. Butler was appointed Executive Director of the District of Columbia Criminal Justice Coordinating Council (CJCC) in May 2011. CJCC, an independent District agency, serves as the forum to facilitate and support systemic planning, analysis, information sharing, problem solving and cooperation among local, federal, legislative, executive and judicial partners to address criminal and juvenile justice issues facing the District of Columbia.

Ms. Butler began her career with the CJCC in 2006 as a Legal Advisor/Program Analyst. In that capacity, she provided general legal and policy analyses on interagency criminal and juvenile justice issues. She also served as Deputy Executive Director where she was responsible for managing the implementation of the agency’s strategic priorities and day to day operations. She was the Interim Executive Director prior to her appointment.

Before joining the CJCC, Ms. Butler was a Senior Associate in the Washington, DC law firm of Curtis White, Esq. specializing in telecommunications and information technology. She also served as the Senior Associate for ALTA Consulting Group, a Washington DC consulting firm specializing in public policy development, project management and organizational development. In addition, she served as the Director of Program Operations for the Urban Family Institute, a nonprofit organization that served youth and families nationally. While at the Urban Family Institute, she developed the Bridge, a program, supported by Maryland’s Department of Public Safety & Correctional Services and in partnership with the Eastern Correctional Institution, for incarcerated fathers to engage and stay connected to their children.

Ms. Butler is a native Washingtonian and attended DC Public Schools. She earned her B.S. in Finance from Georgetown University and J.D. from Georgetown University Law Center. After graduating law school, Ms. Butler served as a Law Fellow for Georgetown University Law Center’s Street Law Clinic.

Victoria Cochran  
Deputy Secretary of Public Safety and Homeland Security  
Commonwealth of Virginia

In January, 2014, Governor Terry McAuliffe appointed Victoria Cochran to serve as the Commonwealth of Virginia’s Deputy Secretary of Public Safety and Homeland Security. Immediately prior to her appointment, Ms. Cochran was Director for the Office of Behavioral Health and Criminal Justice Services in the Department of Behavioral Health and Developmental Services (DBHDS).

Since 2001, Ms. Cochran has worked as a criminal justice and behavioral health “boundary spanner,” leading key stakeholder groups throughout the Commonwealth to develop programmatic, policy and process initiatives that enhance systems interoperability and improve outcomes for justice involved individuals with behavioral health issues. Her leadership was instrumental in establishing Virginia’s first Crisis Intervention Team and the program’s ensuing statewide expansion. She most recently served on Governor McAuliffe’s Prescription Drug and Heroin Abuse Task Force and was instrumental in the creation of Virginia’s new center of excellence, the Center for Behavioral Health and Justice.

Ms. Cochran is a licensed attorney who spent 17 years as a Public Defender in Southwest Virginia. Additionally, she served as adjunct faculty in the Radford University Department of Criminal Justice 2004 – 2010. Ms. Cochran received her B.A. from Oberlin College and her J.D. from the Marshall Wythe School of Law at the College of William and Mary. She is a 2007 graduate of the Sorenson Institute’s Political Leaders Program at the University of Virginia.
Kevin Donahue
Deputy Mayor for Public Safety and Justice for the District of Columbia

In December of 2014, Mayor Muriel Bowser named Kevin Donahue as the Deputy City Administrator and Deputy Mayor for Public Safety and Justice. Kevin is a leader in operational improvements, government innovation, and performance analytics with significant experience in both the District and Federal government.

Kevin previously served as the Executive Director of the Federal government's Performance Improvement Council. In that role, he promoted the use of performance metrics throughout the Federal agencies and coordinated implementation of the Government Performance and Results Modernization Act. Kevin also led the successful development of a reform agenda for the U.S. General Services Administration following a damaging conference-spending scandal. Prior to that, Kevin worked at the U.S. Department of the Treasury, serving as the Director for Strategic & Planning and Performance Improvement and a Senior Advisor to its Assistant Secretary for Management and CFO, where he started TreasuryStat, a continuous review of the Treasury Department’s strategies and operations by its senior leadership.

Prior to his Federal service, Kevin started the CapStat program in DC. As Director of CapStat for the City Administrator, he led the effort to drive improvements in core city functions. Before that he worked at the Washington Metropolitan Area Transit Authority, DC’s Department of Transportation, as well as in the private sector at Mount Vernon Strategies and the Advisory Board Company.

Kevin holds a Bachelor’s degree in Government from Georgetown University, and a Master’s degree in Public Policy from Harvard University. Kevin has lived in Washington, DC for the past 12 years with his wife, Amy. He has two children, Owen and Dylan, who both attend the Inspired Teaching Public Charter School.

Robin Hoey
Commander, Narcotics and Special Investigations Division
Metropolitan Police Department

Commander Robin Hoey joined the Metropolitan Police Department in 1985 after attending Chowan College and the American University in Washington DC. After graduating from the Metropolitan Police Academy, Commander Hoey was assigned to the Fifth District. After two years of patrol duty, Commander Hoey was transferred to the Morals Division which was later renamed The Narcotics & Special Investigations Division, where he worked in the Narcotics Task Force. In 1988, Hoey was promoted to Sergeant and assigned to the Special Operations Division, Emergency Response Team. In 1993, Hoey was assigned to the First District, Vice Enforcement Unit until he was later promoted to Lieutenant. In 1995 Hoey returned to the Special Operations Division, Emergency Response Team as a Lieutenant and platoon leader. Hoey has held assignments in the Major Crash Unit, Special Investigation Division and the Office of Youth Violence Prevention. Commander Hoey served as the Commander of the Sixth District until his reassignment to Corporate Support Bureau. Later Hoey was transferred to the School Safety Division and served as the Field Commander in the Patrol Support Division. Recently Commander Hoey was selected to be inducted into the Chowan University Hall of Fame.

Commander Hoey, who is a 30 year veteran of the MPD, is currently heading the Narcotics & Special Investigation Division where he has been an integral part of the planning and development of two new MPD units, the Criminal Investigative Unit and the Narcotics Enforcement Unit. The Criminal Investigative Unit focuses on providing assistance to DC residents who are victims of crime as well as fostering positive relationships with the citizens. The Narcotics Enforcement Unit is a uniformed unit which provides high visibility to areas where the usage and selling of illegal narcotics is prominent. Not only is Commander Hoey
responsible for the management and day to day operations of these two units, he is responsible for the other units which comprise the NSID. These units are: the Major Narcotics Unit, the Gun Recovery Unit, the Asset Forfeiture Unit, the Electronic Surveillance Unit and the Human Trafficking Unit.

**Linda Jackson**  
Director  
Virginia Department of Forensic Science

Linda Jackson currently serves as Director of the Virginia Department of Forensic Science (DFS). Ms. Jackson has a B.S. degree from Wake Forest University and an M.S. in Chemistry from the University of North Carolina at Charlotte. She began her career with DFS in 1995 as a Controlled Substances Examiner and then was promoted to Section Supervisor, Controlled Substances Section Chief and Chemistry Program Manager before assuming her current position. As Chemistry Program Manager, she managed all technical aspects of Controlled Substances, Toxicology and Trace Evidence disciplines.

Ms. Jackson currently serves on the National Commission of Forensic Science and co-chairs the subcommittee on Accreditation and Proficiency Testing. She served on the international Scientific Working Group for Seized Drug Analysis (SWGDRUG) from its inception in 1997 to 2014. She has served as a certified assessor for the ASCLD/LAB-International program since 2004. She is a member of the American Academy of Forensic Sciences (AAFS), the American Society of Crime Laboratory Directors (ASCLD), and the Mid-Atlantic Association of Forensic Scientists (MAAFS).

**Rahim Jenkins**  
Program Manager  
Department of Youth Rehabilitation Services

Rahim Jenkins, a native Washingtonian and longtime community activist, continues to make his mark on both the local and national levels, through a long and illustrious career as a Youth Advocate and Re-Entry Facilitator. Rahim is recognized as a pioneer in the field—one that demonstrates through innovative programming and a front-line presence, his long-standing commitment to educating, rehabilitating, and uplifting disadvantaged minority youth. His personal and professional philosophy is focused on the constructive empowerment of youth who are disproportionately impacted by the violence and destruction that plagues many of our inner city communities.

Rahim has served as the Youth Policy Advisor to the Mayor and the Director of the District of Columbia Department of Corrections (DOC). While employed at the DOC, Rahim has served as Correctional Officer, Correctional Counselor, Public Affairs Specialist, Special Assistant to the Deputy Director, and Community Liaison Officer—all positions that have contributed to his mastery of many of the issues critical to correctional administration, rehabilitation, criminal and restorative justice.

More than a decade ago, Rahim’s vision inspired him to co-found the Alliance of Concerned Men (ACM), a group comprised of African-American males dedicated to promoting change through intervention at the grass roots level. Following the formation of the Alliance, Rahim became the Founder and Director of the Righteous Men’s Commission (RCM), a national alliance of community-based organizations dedicated to helping minority youth.

In 1993, he was chosen by former D.C. Mayor Sharon Pratt Kelley to serve as the District’s representative to the National Association of Urban Peace and Justice’s Gang Summit. He continues to serve on this organization’s board, which is dedicated to
negotiating peace between previously existing and newly formed gangs throughout the nation. The “Peace Treaty”, which was brokered between such notorious gangs as the Crips, Bloods, Vice Lords, and Gangsta Disciples, continues today.

Rahim also works closely with neighboring jurisdictions and has partnered with officials from Prince George’s County, Maryland to implement strategies to improve their offender re-entry initiatives and policies.

In January 2013 Rahim was appointed to the Department of Youth and Rehabilitation Services, Department of Transportation. Rahim serves as the Program Manager, with the primary responsibility to operate a centralized secured transportation unit.

Rahim, a graduate of Eastern Senior High School and he also attended Alabama A & M University, has extensive training in gang truce negotiations, manhood development, and combating countercultural influences in the development of productive lifestyles.

Stephen T. Kaminski  
Executive Director  
American Association of Poison Control Centers

Stephen T. Kaminski, JD, serves the American Association of Poison Control Centers (AAPCC) as its Chief Executive Officer and Executive Director. Medical professionals at the nation’s 55 poison control centers collectively handle close to 9,000 exposure and information calls each day to the National Poison Help Line (800-222-1222).

Stephen’s former positions include those as Executive Vice President at the American Humane Association and Vice President of Legal Affairs at Discovery Communications. He also spent time with the United States Court of Appeals for the Federal Circuit and as a patent litigator and corporate attorney representing pharmaceutical and biotechnology clients at Covington & Burling.

Stephen received his law degree from Harvard Law School and bachelor’s degree in chemical engineering from Johns Hopkins University. In addition, he holds an Executive Certificate in Non-Profit Leadership from Duke University.

Clifford Keenan  
Director  
Pretrial Services Agency for the District of Columbia

Cliff Keenan became Director of the Pretrial Services Agency for the District of Columbia in July 2012, having previously served as Deputy Director since 2005. He received his B.A. from Georgetown University in 1976 and his J.D. from the Columbus School of Law at Catholic University in 1983. He began his career in law enforcement in 1973 when he joined the D.C. Metropolitan Police Department (MPD). He remained with MPD until 1985, finishing both his undergraduate work and law degree requirements while serving in various assignments. Mr. Keenan became an Assistant United States Attorney with the U.S. Attorney’s Office (USAO) in D.C. in 1985 and served in a variety of litigation assignments. In 1996, he developed the Community Prosecution Pilot Project for then-U.S. Attorney Eric Holder. Mr. Keenan remained at the USAO until September 2004 when he became Director of Operations at PSA.
Quintin Kelly  
Lieutenant  
Virginia State Police

Lieutenant Kelly is currently the Drug Unit Commander for the Fairfax Field Office Drug Enforcement Section. A native of Brunswick County he began his state police career in 1986. During his tenure with the Virginia State Police, he has served as a trooper, special agent, sergeant, first sergeant and lieutenant.

Lieutenant Kelly earned a Bachelor of Science Degree in Organizational Management and Development from Bluefield College and a Post-Baccalaureate Certificate in Criminal Justice Administration from Virginia Commonwealth University. He is also a graduate of the FBI National Academy (NA Class 242) and the DEA Drug Unit Commanders Academy. Lieutenant Kelly has also earned several awards for Outstanding Service and Contribution to the Cause of Justice.

Katherine A. Klausmeier  
Senator, District 8  
Maryland State Senate

Katherine Klausmeier is a Democratic politician from Maryland. She is currently serving in the Maryland State Senate and is a member of the Senate Finance Committee. She was first elected as a Delegate in 1994, and as a State Senator in 2002. Senator Klausmeier represents the 8th Legislative District which includes part of Baltimore County.

Born in Baltimore, Maryland, Klausmeier attended The Catholic High School of Baltimore. She has an Associate degree from the Community College of Baltimore County (formerly Essex Community College) and developed the Child Life Department at St. Joseph Hospital in Baltimore County. She was President of the Gunpowder Elementary School PTA (1987—89, 1991—94) and has an Honorary Life Membership to the Maryland Parent Teacher Association.

Klausmeier is married and has two daughters.

Christine Kourtides  
Senior Policy Advisor  
Office of National Drug Control Policy

Christine Kourtides is a Senior Policy Advisor in the Office of the Director at the Office of National Drug Control Policy, where has worked for 9 years. Her policy areas of focus are marijuana, international demand reduction, and rising drug issues such as New Psychoactive Substances. She has 14 years’ experience developing and promoting domestic and international drug policy. Prior to Federal service, Christine Kourtides worked in Vienna, Austria on issues taken up by United Nations Office on Drugs and Crime and members of the Commission on Narcotic Drugs and the Commission on Crime Prevention and Criminal Justice. She attended Bryn Mawr College, Katholieke Universiteit Leuven, and the Paul H Nitze School of Advanced International Studies.
Phil Mendelson
Chairman
Council for the District of Columbia

Phil Mendelson was first elected to the Council of the District of Columbia in November of 1998 as an At-Large Councilmember. He served the District in that role until June 2012 when, following the departure of the previous Council Chairman, Phil was selected by his colleagues to take over that role. In November 2012, District voters overwhelmingly elected Phil as Chairman of the Council.

As Chairman, Phil leads the Council on all legislative matters. Phil also presides over the Committee of the Whole which includes: the DC Auditor; Board of Zoning Adjustment; District of Columbia Community College; District of Columbia Retirement Board; District Statehood Commission; District Statehood Compact Commission; Metropolitan Washington Airports Authority; Metropolitan Washington Council of Governments; National Capital Planning Commission; Office of Budget and Planning; Office of Planning; Office of Zoning; Tax Revision Commission; Tobacco Settlement Financing Corporation; University of the District of Columbia; and the Zoning Commission.

In 2014 Phil was elected Chairman of the Board of Directors for the Metropolitan Washington Council of Governments (COG), a position he also held in 2004. The COG Board is comprised of local and state elected officials from the District of Columbia, Maryland, and Virginia. As Chairman, Phil will continue to work with regional colleagues to further the common goals and interests in moving the region forward.

Phil has been an active participant in District politics since 1975, when he became a member of the McLean Gardens Residents’ Association. In this role he was a large part of the effort to save the 43-acre housing complex from destruction. In 1979 Phil successfully ran for a seat on the Advisory Neighborhood Commission (ANC) and continued to serve as an ANC Commissioner until he took office as an At-Large Member of the Council.

Prior to becoming Chairman, Phil served eight years as Chair of the Council’s Committee on the Judiciary. In this role he was responsible for oversight over the District’s public safety agencies—including the Metropolitan Police Department, Fire & Emergency Medical Services Department, and the Office of the Attorney General for the District of Columbia—as well as legislation impacting criminal laws in the District. As Chair of this Committee, Phil conducted robust oversight over the operations and budget of those agencies under his jurisdiction, and guided numerous public safety measures through the Council. Among the bills approved by the Council during his term as Chair were: a number of omnibus public safety measures; reform of, and updates to, the District’s gun laws (in response to the Supreme Court’s Heller decision); marriage equality; medical marijuana legislation; the establishment of an elected Attorney General; and an overhaul of the District’s drunk driving laws.

Phil came to the District from Cleveland, Ohio in 1970 to obtain a Bachelor’s Degree in Political Science from American University. He grew up in a family dedicated to public service. His mother was a national crusader for nursing home reform. His grandmother had been President of the Michigan State League of Women Voters, was appointed by President Roosevelt to the Federal Office of Price Administration, and was a founder of the Grand Rapids Urban League.

Phil has an adorable daughter Adelaide, who attends DC Public Schools. He lives in Northwest DC.
Dr. Roger Mitchell  
Chief Medical Examiner  
Office of the Chief Medical Examiner for the District of Columbia  

Dr. Roger Mitchell Jr. is board certified in Anatomic and Forensic Pathology by the American Board of Pathology. He is a Fellow with the American Society of Clinical Pathology (ASCP) and the National Association of Medical Examiners (NAME). Dr. Mitchell sits on national subcommittees for NAME including Education & Planning and Strategic Planning. 

He is a graduate of Howard University, Washington DC, and UMDNJ-New Jersey Medical School, Newark, NJ. Dr. Mitchell is licensed to practice medicine in New Jersey and Washington DC. He has performed over 1300 autopsy examinations in his career and has testified as an expert on numerous cases. 

He began the study of forensic science and violence prevention as a Forensic Biologist for the Federal Bureau of Investigation (FBI) — DNA Unit in January 1997 at the FBI Headquarters Building. 

Dr. Mitchell served 4 years as the Assistant Deputy Chief Medical Examiner, in charge of Medicolegal Death Investigations, at the Harris County Institute of Forensic Sciences prior to serving 2 years as the Regional Medical Examiner for the Northern Regional Medical Examiner Office in Newark, NJ. Dr. Mitchell has served in large cities such as New York City, Houston, and Newark, NJ. 

Dr. Mitchell has great interest in violence as a public health issue. He believes the medical examiner serves a critical role in public health prevention initiatives and continues to be at the forefront of issues relating to Elder Abuse & Neglect and Youth Violence. He is recently published for his work on “Forensic Markers Associated with a History of Elder Mistreatment and Self Neglect” in the Academic Forensic Pathology journal. 

He is also well versed in Mass Fatality Management and pledges his commitment to the preparedness of Washington DC. 

Dr. Mitchell is no “new comer” to the District. In addition to receiving his undergraduate degree in biology from Howard University, Dr. Mitchell performed his pathology residency at George Washington University Hospital where he served as Chief Resident. 

Dr. Roger A. Mitchell, Jr. is dedicated to the service of our community and is excited to serve our nation’s capital as its next Chief Medical Examiner. 

He is married to a DC native and has three wonderful children. 

Dr. LaQuandra Nesbitt  
Director  
District of Columbia Department of Health  

Dr. LaQuandra S. Nesbitt is a board-certified family physician who became the Director of the District of Columbia Department of Health in Washington, DC in January 2015. In her role as Health Director, Dr. Nesbitt leads Mayor Muriel Bowser’s health and wellness initiative, FitDC, and serves key leadership roles in addressing critical public health issues such as the use of synthetic drugs, the impact of medical marijuana and decriminalization of marijuana possession on public health, as well as innovation in healthcare delivery and its impact on high cost, high need and other special populations. Prior to her role in DC, Dr. Nesbitt served
as the Director of the Louisville Metro Department of Public Health and Wellness where she led initiatives focused on Affordable Care Act implementation, health equity, and violence prevention.

In addition to her professional activities, Dr. Nesbitt is a published author and served as an executive editor of Population Health: Management, Policy, and Technology, First Edition. She is an active member of the community serving on a number of boards and commission. Dr. Nesbitt was appointed by Governor Steve Beshear to a four year term as a member of Kentucky’s Early Childhood Advisory Council and now serves in a similar capacity on the District of Columbia’s State Early Childhood Development Coordinating Council. Dr. Nesbitt serves nationally as a member of the Commonwealth Fund Health Care Delivery System Reform Program National Advisory Group. She has previously held roles as a member of the Federal Reserve Bank of St. Louis’ Health Industry Council and the National Children’s Study Central Region Community Engagement Advisory Committee.

Dr. Nesbitt received her Bachelor of Science degree in Biochemistry from the University of Michigan, her medical degree from Wayne State University School of Medicine, and a Master of Public Health in Health Care Management and Policy from the Harvard School of Public Health. She completed an internship in family medicine at the University Hospitals of Cleveland/Case Western Reserve University and completed the remainder of her family medicine residency in the University of Maryland’s Department of Family Medicine where she served as chief resident. Dr. Nesbitt completed her fellowship training with the Commonwealth Fund Harvard University Fellowship in Minority Health Policy.

Karl A. Racine
Attorney General for the District of Columbia

Attorney General Karl A. Racine brings over 25 years of experience as a practicing lawyer and good steward of leading law firms and organizations to the Office of the Attorney General.

As the Attorney General’s mission is to use the law to serve the people of the District of Columbia, Attorney General Racine advises the Executive Branch and other District agencies, defends the city in court, and protects the city’s residents. He has pledged to prioritize consumer protection, enforce affordable housing regulations, and find alternatives that can divert young people out of the juvenile justice system.

His commitment to equal justice was inspired by his parents, who fled authoritarian rule in Haiti, to start a new life in the US and by the attorneys of the civil rights movement who used the law to make positive social change.

Racine has deep and wide-ranging legal experience. He volunteered as a law student in a clinic supporting migrant farm worker’s rights; represented indigent residents in the DC Public Defender Service; practiced white-collar and commercial litigation with Cacheris & Treanor and Venable LLP; served as Associate White House Counsel in the Clinton Administration; and served on the District’s Judicial Nomination Commission. When Racine became Managing Partner at Venable LLP, where he managed over 600 attorneys, he became the first African-American managing partner of a top-100 law firm. The National Law Journal named Racine one of the 50 most influential Minority Lawyers in the United States.

A lifelong District resident, Racine attended Murch Elementary School, Deal Junior High, and Wilson High, and graduated from St. Johns College High School. He also played basketball in youth sports leagues across the city. Racine is deeply committed to the community, assembling what the Washington Post called “a rich record of community service” and remains involved in a variety of causes, including youth literacy and mentoring.

Racine earned his bachelor’s degree at the University of Pennsylvania and his law degree from the University of Virginia School of Law.
**Dr. Tanya A. Royster**  
**Director**  
**District of Columbia Department of Behavioral Health**  

Dr. Royster is a clinician, administrator, teacher, researcher, innovator, legal consultant and media expert. She is currently the Acting Director of the Washington DC Department of Behavioral Health.

Dr. Royster has served in Illinois state government, worked in public sector, private sector and academic medical settings. She earned tenure at the University of Illinois at Chicago (UIC) and taught in the departments of medicine, nursing, social work and Honors college of UIC. Additionally, the Annie E. Casey Foundation selected Dr. Royster as one of its 2010-2011 Child and Family Fellows. The Foundation selects accomplished public systems administrators, nonprofit leaders, and community development professionals from across the country, committed to helping low-income families succeed as parents, community members, and productive participants in the workforce and economy to receive this honor.

Dr. Royster has a proven track record and long-standing interest in creating and sustaining healthy communities, culturally competent care, delivering quality services, system transformation and health care disparities. She is well published and provides service in a variety of endeavors.

Dr. Royster graduated from Case Western Reserve University School of Medicine and completed both her General Psychiatry and Child and Adolescent Psychiatry residencies at New York University/Bellevue Hospital Medical Center in New York City.

**Rafael Sa’adah**  
**Acting Deputy Fire Chief**  
**District of Columbia Fire and Emergency Medical Services Department**  

Rafael Sa’adah is a twenty-four year veteran of the D.C. Fire & Emergency Medical Services Department, and currently serves as the Acting Deputy Fire Chief for EMS. He is a Nationally Registered Paramedic and holds a Bachelor of Science in Fire Science Administration and a Master’s Degree in Public Administration, both from the University of the District of Columbia. He completed the Certified Public Manager certificate program at the George Washington University and is currently enrolled in the Master of Arts in Security Studies program at the Naval Postgraduate School. Chief Sa’adah is proud to be a District of Columbia resident and a product of the DC public school system. Chief Sa’adah’s incident management experience includes serving as the EMS Branch Director for the Presidential Inauguration of Barack H. Obama, 1/18—1/21/2009, the largest planned special event in U.S. history. In March 2011, his efforts to improve EMS in the District of Columbia were recognized nationally with the James O. Page/JEMS Leadership Award.

**Special Agent John R. Scherbenske**  
**Executive Assistant, Office of Diversion Control**  
**United States Drug Enforcement Administration**  

John Scherbenske has been a Special Agent with the United States, Drug Enforcement Administration (DEA) since 1991 and has worked in the Washington, DC and Richmond, Virginia field offices. Special Agent Scherbenske transferred to DEA Headquarters in Arlington, Virginia in September 2008 where his assignments have included the Unit Chief in the Pharmaceutical Investigations Section and the Chief of the Synthetic Drugs and Chemicals Section. In January 2015, Special Agent Scherbenske was assigned to his current position, the Executive Assistant to the Deputy Assistant Administrator of the Office of Diversion Control.
Denise Simmonds
Acting Principal Assistant United States Attorney
Office of the United States Attorney for the District of Columbia

Denise Simmonds was awarded her Bachelor of Arts degree in Sociology from Boston University in 1988, and her Juris Doctor degree, *cum laude*, from the Georgetown University Law Center in 1994. At Georgetown, Denise was a Legal Research & Writing Fellow and a member of the Domestic Violence Law Clinic, representing indigent victims of abuse in the District of Columbia Superior Court. Following law school, she served as a judicial law clerk to the Honorable James T. Giles, U.S. District Court for the Eastern District of Pennsylvania. In 1996, she joined the law firm of Skadden, Arps, Slate, Meagher & Flom, L.L.P., in Washington, D.C., where she was an associate in the Litigation Department handling white collar criminal investigations, mortgage and financial services litigation, and class action lawsuits. For a six-month period during her tenure at Skadden, Arps, Denise worked for the Legal Aid Society of the District of Columbia, where she represented District of Columbia residents in child custody and support, domestic violence, landlord and tenant, and public benefit actions in D.C. Superior Court.

Denise joined the Office of the United States Attorney for the District of Columbia as an Assistant U.S. Attorney in June 2003, and has served with distinction in the Appellate Division and the Misdemeanor, Felony Trial, Grand Jury, and Domestic Violence (Felony) Sections of the Superior Court Division. In September 2006, Denise was selected to serve as a Senior Assistant in the Sex Offense and Domestic Violence Section, where she handled serious, non-fatal sexual assault and child abuse cases. Denise was selected to be a Senior Litigation Counsel in 2008. In 2009, she was selected to serve as a Deputy Chief of the Misdemeanor Unit of the General Crimes Section. And, from May 2010 until January 2012, she served as the Deputy Chief of the Sex Offense and Domestic Violence Section, when then U.S. Attorney, Ronald C. Machen Jr. asked her to join his Front Office staff. From January 2012 until July 2015, Denise served as the Special Counsel for Professional Development & Training, where she was responsible for, among other things, the training and professional development of the attorneys and support staff at the U.S. Attorney’s Office. She also served as a Professional Responsibility Officer. In July 2015, Denise was selected by Acting United States Attorney Vincent H. Cohen, Jr. to serve as the Acting Principal Assistant United States Attorney.

Denise has received numerous Special Achievement Awards since joining the U.S. Attorney’s Office. Additionally, in 2008 she received a Director’s Award for Superior Performance by a Litigation Team from the Department of Justice for the prosecution of a serial child sexual predator; and in 2012, she received a STAR Award from the U.S. Attorney for the District of Columbia for her distinguished service to the Office.

She has spoken at national conferences and provided training at the National Advocacy Center and to local law enforcement and advocacy groups on physical and sexual violence against women and children. In 2011, she co-taught a week-long seminar on domestic violence and victim’s rights in Albania. Denise also has provided training on various aspects of the American criminal Justice system to foreign delegations from more than one dozen countries.

Prior to attending law school, Denise worked for Massachusetts Attorney General James Shannon as a consumer advocate and community liaison working with recent immigrants and communities of color in the greater Boston area. She also served as a CASA advocate for abused and neglected children in Boston’s inner city.
Dr. Jenifer Smith
Director
District of Columbia Department of Forensic Sciences

Dr. Jenifer Smith was appointed as Acting Director of the Department of Forensic Sciences (DFS) in July, 2015. Smith is a retired Federal Bureau of Investigations (FBI) Special Agent, having served for 23 years, and was formerly a faculty member at Pennsylvania State University from 2010-2015.

At the FBI Smith oversaw DNA analysis, implemented numerous analysis methods and testified in hundreds of cases. As a member of the US Government Senior Executive Service, her final assignment with the FBI was Chief of the Weapons of Mass Destruction Intelligence Analysis Section. Smith also led the CIA’s Biological Technology Center and has served on several federal advisory groups that support national security entities concerned with microbial forensics.

As a DFS consultant, Smith provided her expertise in assessing the findings of the Independent Audit of the Forensic Biology Unit, and provided her recommendation for trainings on DNA mixture interpretation. As a direct result, the Assessors from ANSI-ASQ National Accreditation Board (ANAB) in their follow up assessment in June 2015 accepted all of the Department’s corrective action responses.

Smith’s goals for DFS include strengthening communication and collaboration between DFS and key agencies while maintaining scientific integrity and independence; emphasizing strong management and fiscal responsibility; and conducting and delivering the highest quality testing and results.

Smith holds a Bachelor of Science in Biochemistry from Pennsylvania State University, a Ph.D. in Physiological Chemistry from Ohio State University and Post Doctorate from Harvard University.

Lieutenant Ronald G. Smith
Deputy Director, Special Investigations Division
Montgomery County Police Department

Lieutenant Ronald G. Smith has been with the Montgomery County Police Department (MCPD) since 1981. During his tenure, he has served in all four bureaus of the department. He has spent the most recent three years serving as Deputy Director of the Special Investigations Division of MCPD.

Lieutenant Smith has a Bachelor of Science in Criminal Justice from the John Jay College of Criminal Justice in New York City, and he is a graduate of the Northwestern University School of Police Staff and Command.

Courtney Snowden
Deputy Mayor for Economic Development

Deputy Mayor for Greater Economic Opportunity Courtney R. Snowden is a sixth-generation Washingtonian. Born at Howard University Hospital and raised in the Shepherd Park neighborhood of Ward 4, Deputy Mayor Snowden now lives east of the river in Ward 7 with her young son, Malik.
A graduate of D.C. Public Schools and Beloit College in Wisconsin, Deputy Mayor Snowden began her career on the legislative staff of Congresswoman Tammy Baldwin (D-WI) on Capitol Hill. She has been an active leader in the city’s LGBT and African-American communities and a staunch public education advocate. Deputy Mayor Snowden has devoted her life to making Washington, D.C. a better place for all its residents, corner to corner. She recently left her role as a principal with the Raben Group, a premiere progressive government relations firm, to take on the role of Deputy Mayor for Greater Economic Opportunity.

Michen M. Tah
Policy Analyst
Criminal Justice Coordinating Council

Michen M. Tah joined the Criminal Justice Coordinating Council (CJCC) as a Policy Analyst in December of 2012. Ms. Tah’s areas of focus at CJCC include reentry, substance abuse, and mental health. She is also the Project Manager for the CJCC Resource Locator.

Prior to her current position, Ms. Tah practiced civil and criminal law as an associate attorney at Dudley, Topper, and Feuerzeig, LLP. She has also served as a law clerk to the Honorable James S. Carroll III, Judge of the Superior Court of the Virgin Islands.

Ms. Tah received her A.B. in Politics and a Certificate in African-American Studies from Princeton University in 2005 and her law degree from Georgetown University Law Center in 2008. She is licensed to practice law in Maryland and the U.S. Virgin Islands.

We would like to extend a special thank you to our youth panelists for sharing their insights on this important topic.

Jessica Dildy | Brittney Floyd