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OFFICE OF NATIONAL DRUG CONTROL POLICY
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“Dangerous Synthetic Drugs”

Caucus on International Narcotics Control
United States Senate

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Written Statement
of
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Chairman Feinstein, Co-Chairman Grassley, and distinguished members of the Caucus, thank you for this opportunity to address the serious problem of synthetic drug use in America. As you know, the Office of National Drug Control Policy (ONDCP) was established in 1988 by Congress with the principal purpose of reducing illicit drug use, manufacturing, and trafficking; drug-related crime and violence; and drug-related health consequences. As a component of the Executive Office of the President, our office establishes policies, priorities, and objectives for the Nation's drug policies. We also evaluate, coordinate, and oversee the international and domestic anti-drug efforts of Executive Branch agencies and ensure such efforts sustain and complement state and local drug policy activities.

As Deputy Director of National Drug Control Policy, my position allows me to raise public awareness and take action on drug issues affecting our Nation. Before being appointed to my current position by the President in February 2013, I was Director of the Bureau of Substance Abuse Services in the Massachusetts Department of Health. There, I worked to establish a treatment system for adolescents, early intervention and treatment programs, jail diversion programs, re-entry services for those leaving state and county correctional facilities, and drug overdose prevention programs. In addition, I have served in a variety of leadership roles for the National Association of State Alcohol and Drug Abuse Directors. I have also served as a member of the Advisory Committee for the Substance Abuse and Mental Health Services Administration's (SAMHSA) Center for Substance Abuse Prevention, and the National Action Alliance for Suicide Prevention.

At ONDCP, we are charged with producing the *National Drug Control Strategy* (*Strategy*), the Administration's primary blueprint for drug policy, along with a national drug control budget and guidelines for cooperation among Federal, state, local, and tribal entities. The *Strategy* is a science-driven plan for drug policy reform in America that is guided by the latest research on substance abuse and substance use disorders. The *Strategy* also moves beyond an outdated "war on drugs" approach, while also rejecting drug legalization as a "silver bullet" solution to the drug problem. Neither of these extreme approaches is guided by what experience, compassion, or science demonstrate about the true nature of drug use in America. This 21st century plan outlines a series of evidence-based reforms that treat our Nation's drug problem as a public health issue, not just a criminal justice issue.

The Risk to Public Health from Synthetic Drugs

Among other substance abuse issues, the *Strategy* highlights the new challenges that communities across the country face related to synthetic drugs.

Synthetic cannabinoids – commonly referred to as "synthetic marijuana," "Spice," or "K2" – typically consist of plant material onto which manmade chemicals have been applied, often sprayed. These chemicals purport to mimic Δ^9 -tetrahydrocannabinol (THC), the primary psychoactive ingredient in marijuana.

Synthetic cathinones – often referred to as "bath salts" – are based on the Schedule I controlled substance cathinone, a central nervous system stimulant and active ingredient of the khat plant. These substances purport to mimic effects similar to those associated with other

stimulants such as methamphetamine, 3,4-methylenedioxy-methamphetamine (MDMA or “Ecstasy”), and cocaine.

These drugs present an array of health and safety risks. The contents and effects of synthetic cannabinoids and cathinones are unpredictable due to a constantly changing variety of chemical compounds used in manufacturing processes that are devoid of quality controls and regulatory oversight. The use of these substances can cause vomiting, anxiety, agitation, irritability, seizures, hallucinations, tachycardia, elevated blood pressure, and loss of consciousness.¹ They have also caused significant organ damage as well as overdose deaths.²

Synthetic drugs may also be highly addictive. According to an animal study conducted by researchers at the Scripps Research Institute in California and published this year in the journal *Neuropharmacology*, the synthetic chemical 3,4-methylenedioxypyrovalerone (MDPV), a common ingredient in bath salt products, may have a higher potential for compulsive use than methamphetamine.³

Unfortunately, many families have experienced the tragedy that synthetic drug use can bring. This Caucus has heard from the Rozga family of Iowa, whose son David fatally shot himself an hour after smoking “K2,” a synthetic cannabinoid product.⁴ Since their tragedy, the Rozga family has been outspoken advocates of prevention and regulation to prevent similar tragedies from happening to other families.

Across the country, use of synthetic cannabinoids such as the kind used by David Rozga is alarmingly high, especially among young people. According to the 2012 Monitoring the Future survey of youth drug-use trends, one in nine 12th graders in America reported using synthetic cannabinoids in the past year. This rate, unchanged from 2011, puts synthetic cannabinoids as the second most frequently used drug among high school seniors after marijuana.⁵

The use of these drugs is also burdening our health care system. According to a 2013 report by SAMHSA’s Drug Abuse Warning Network, 28,531 emergency department visits involving a synthetic cannabinoid product occurred in 2011. The number of 2011 visits was 2.5 times higher than the 11,406 emergency department visits that took place just a year earlier in 2010.⁶ Recent reporting also found that bath salts were involved in 22,904 emergency

¹ Drug Enforcement Administration, *Updated Results from DEA’s Largest-Ever Global Synthetic Drug Takedown Yesterday*. June 2013. Available: <http://www.justice.gov/dea/divisions/hq/2013/hq062613.shtml>

² *Id.*

³ Aarde S.M. et al, *The novel recreational drug 3,4-methylenedioxypyrovalerone (MDPV) is a potent psychomotor stimulant: Self-administration and locomotor activity in rats*, *Neuropharmacology*, Volume 71, August 2013, 130–140. Available: <http://www.sciencedirect.com/science/article/pii/S0028390813001408>

⁴ Office of National Drug Control Policy, *2013 National Drug Control Strategy*, 9; see also Rozga website at <http://www.k2drugfacts.com/davidsstory.html>

⁵ University of Michigan News Service, *The rise in teen marijuana use stalls, synthetic marijuana use levels, and use of “bath salts” is very low*. December 2012. Available: <http://www.monitoringthefuture.org/pressreleases/12drugpr.pdf>

⁶ Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality, *Drug Abuse Warning Network, 2011: National Estimates of Drug-Related Emergency Department Visits*. May 2013. Available: <http://www.samhsa.gov/data/2k13/DAWN2k11ED/DAWN2k11ED.htm>

department visits in 2011, highlighting the considerable toll these drugs are taking in health care settings nationwide.⁷

Law enforcement reporting is showing similar trends. In 2013, the National Methamphetamine and Pharmaceuticals Initiative (NMPI), funded by ONDCP's High Intensity Drug Trafficking Areas (HIDTA) program, polled law enforcement around the country about the availability of synthetic drugs in their region as part of NMPI's annual questionnaire to law enforcement officials. Most regions reported synthetic cannabinoids, synthetic cathinones, or both as being readily available, and many reported an increase in availability.⁸ For example, the Rocky Mountain HIDTA – which includes parts of Iowa, North Dakota, South Dakota, Nebraska, Kansas, Missouri, and Illinois – reported no seizures of synthetic cannabinoids between 2008 and 2010; however, 38 seizures were reported between January and August of this year alone.

Following the dramatic increase of calls between 2010 and 2011, poison control centers have experienced a decline in synthetic drug exposure calls in the last year and a half. This decline follows an increase in related state and Federal legislation, law enforcement activities, as well as a likely increase in knowledge within the health care community that enabled those professionals to address synthetic drug symptoms and treatments without the need to call poison control for guidance.⁹

Federal and State Responses

There is an ever-expanding array of synthetic drugs available. In 2012, 51 new synthetic cannabinoids were identified through the Drug Enforcement Administration's (DEA) National Forensic Laboratory Information System, compared to just 2 in 2009.¹⁰ Furthermore, 31 new synthetic cathinones were identified in 2012, compared to only 4 in 2009.¹¹ Another 76 synthetic compounds were identified in 2012, bringing the total number of new synthetic substances identified in 2012 alone to 158.¹²

⁷ Substance Abuse and Mental Health Services Administration, *The DAWN Report Data Spotlight: "Bath Salts" Were Involved in Over 20,000 Drug-Related Emergency Department Visits in 2011*. September 2013. Note: this information has not been publically released.

⁸ The National Methamphetamine and Pharmaceuticals Initiative survey was conducted prior to its annual Strategy Summit, which was held in May 2013.

⁹ Specifically, the number of calls related to synthetic cannabinoid exposure was 2,906 in 2010, 6,968 in 2011, 5,205 in 2012, and 1,593 through July 2013. In addition, the number of calls related to bath salt exposure received by poison control centers across the country was 304 in 2010, 6,136 in 2011, 2,657 in 2012, and 605 through July 2013. Available:

https://aapcc.s3.amazonaws.com/files/library/Synthetic_Marijuana_Data_for_Website_7.31.2013.pdf;

https://aapcc.s3.amazonaws.com/files/library/Bath_Salts_Data_for_Website_7.31.2013.pdf

¹⁰ Drug Enforcement Administration. "New Psychoactive Substances: Regional Approaches and Challenges: United States – Situation and Response, March 11, 2013. Presentation at the 56th Session of the Commission on Narcotic Drugs. Cited in United Nations Office on Drugs and Crime, *World Drug Report 2013*, p. 86. May 2013. Available: http://www.unodc.org/unodc/secured/wdr/wdr2013/World_Drug_Report_2013.pdf

¹¹ *Id.*

¹² *Id.* p. 85.

The development of new synthetic drugs for the U.S. market may be the result of attempts to circumvent Federal, state, and local laws that comprehensively ban recognized synthetic compounds. As you know, President Obama signed into law the Food and Drug Administration Safety and Innovation Act of 2012, which included the Synthetic Drug Abuse Prevention Act, which was spearheaded by the leadership of this Caucus last year. The law provides a mechanism for future scheduling of five classes of synthetic cannabinoids, and placed 26 specific synthetic cannabinoids, synthetic cathinones, and other synthetic substances into Schedule I of the Controlled Substances Act (CSA). It also permitted the DEA to administratively schedule substances for 36 months, thereby doubling the 18 months previously allowable under its temporary scheduling authority.

States have also taken action. Some states, such as Kentucky, have enacted legislative bans that define synthetic cannabinoids and cathinones broadly by structural class. Other states, such as Iowa, have defined synthetic drugs using a combination of broad structural classes and specific synthetic substances. States such as Florida have banned extensive lists of specific synthetic substances and implemented alternative means of reprimand, such as identifying retailers that sell synthetics and depriving them of the ability to sell lottery tickets.

As soon as synthetic compounds are banned, however, suppliers adjust the chemical composition of their product in an attempt to circumvent new laws. Federal law enforcement may treat these new products as controlled substances under the Controlled Substance Analogue Enforcement Act of 1986 (Analogue Act) if they are intended for human consumption¹³ and a variety of conditions are met. The Government must show that a drug is substantially similar in chemical structure to another drug that is already controlled under schedule I or II. In addition, the drug must have a similar pharmacological effect, or be represented or intended to have a similar pharmacological effect, to another drug that is already controlled under schedule I or II. At this time, most courts are requiring the Government to compare the designer drug to the *same* controlled substance in terms of chemical structure and pharmacological effect, although these comparisons are not always scientifically possible. Regardless, proving that a new compound is substantially similar to an already controlled substance often results in a battle of scientific experts in court, which complicates – and sometimes precludes – successful prosecution. Moreover, the judicial or jury conclusion that a particular substance is an analogue in one case does not carry over into subsequent cases. We look forward to working with Congress to help address the scientific and legal challenges posed by synthetic drugs.

The large number of new synthetic drugs has also resulted in two challenges involving testing. First, due to the constant formulation changes made by suppliers, the detection of synthetic drugs has not been made a regular part of most drug tests. As a result, users ingest synthetics in order to avoid detection by workplace or law enforcement screening. Today, we are releasing the results of an ONDCP-supported pilot study of criminal justice system drug tests in three Mid-Atlantic sites that suggests that current drug testing misses significant synthetic cannabinoid use in the populations they monitor. For example, the study found that in a sample of men 30 years of age and younger, and who are in the District of Columbia parole and probation system, 39 percent of those who cleanly passed a traditional drug screen tested positive

¹³ 21 U.S.C. 813 (“A controlled substance analogue shall, to the extent intended for human consumption, be treated, for the purposes of any Federal law as a controlled substance in schedule I.”).

for synthetic cannabinoids.¹⁴ Overall, between one-quarter and one-third of young men who were tested in the Washington, D.C., criminal justice system had positive test results for synthetic cannabinoids, regardless of whether they had failed or passed a traditional drug screen.¹⁵

Second, identifying new synthetic substances in crime laboratories has been a challenge. State and local laboratories, which a few years ago were seeing only a small number of standard drug types, have been inundated, and often encumbered, while attempting to identify new types of synthetic drugs. To help in the identification of these new substances, laboratories have built informal methods of communication through regional relationships and online groups, but some state officials have indicated that a nationwide communication infrastructure is needed to alert states of new synthetic substances and to provide state and local laboratories with standards by which new substances can be tested. The DEA has indicated that it plans to improve its National Forensic Laboratory Information System to allow communication about synthetic substances among forensic laboratory personnel across the country. This DEA action will help fill the need for a centralized means of communication among states and the Federal Government pertaining to new synthetic substances.

The availability of synthetic drugs for purchase on the Internet provides an additional challenge to controlling these substances. Any quick search of the Internet shows the numerous sites that sell synthetic drugs and the relative ease with which these substances can be purchased. These sites in many cases refer to themselves as providing “legal highs” and refer to the fact that they are in compliance with government synthetics bans. The ease with which online companies can adapt to bans poses an ongoing challenge for controlling these substances and protecting public safety. ONDCP has met with credit card companies to educate them about these products and explore ways to disrupt such online businesses. Credit card companies sit at an important nexus between the websites selling these dangerous drugs and consumers seeing a quick and easy means to purchase them.

Prevention Efforts

ONDCP is taking steps to prevent the use of synthetic drugs by educating the public, particularly young people and parents. Because of their relatively recent introduction to the U.S. market, many families are not familiar with synthetic drugs. Also, since they are sometimes referred to as “incense” or “legal highs,” this often masks the danger they can pose to individuals.

ONDCP manages the Drug Free Communities (DFC) Support Program, which provides grants to almost 700 local drug-free community coalitions, enabling them to increase collaboration among community partners, including local youth, parent, business, religious, civic, law enforcement, and other groups, to prevent and reduce youth substance use, including synthetic drug use. ONDCP recently announced the DFC awardees for Fiscal Year 2013.

¹⁴ Office of National Drug Control Policy, *Community Drug Early Warning System: The CDEWS Pilot Project*, 13, September 2013.

¹⁵ *Id.* p. vi.

DFC coalitions across the country have identified synthetic drugs as a growing problem in their communities and have taken action. For example, the Franklin Mayor's Drug and Alcohol Abuse Task Force in New Hampshire worked with the city of Franklin to adopt the first synthetic cannabinoid ordinance in that state. The ordinance brought the issue of synthetic drugs to the forefront in the community as many residents had never heard of "K2" or "Spice," and many did not know that it was being sold in Franklin convenience stores. Other cities in New Hampshire have since reached out to Franklin as they consider adopting similar laws. Another DFC grantee, the Clinton Substance Abuse Council in Iowa, worked with the Clinton Police Department to facilitate a synthetic drugs drop off day for retailers. And in California, the Santee Solutions Coalition in Santee helped local law enforcement identify businesses selling synthetic drugs. These are just a few examples of the many DFC grantees around the country seeking to educate their communities about these dangerous substances.

In addition, the National Youth Anti-Drug Media Campaign provides teen exposure to anti-drug messages through a combination of advertising through outlets such as online social media, and radio and television. The Media Campaign's "Above the Influence" brand (www.abovetheinfluence.com), which is being transitioned to the Partnership at Drugfree.org, is an important national tool for informing and inspiring young people to reject illicit drugs, including synthetics. It has curated discussions about synthetic drugs on its Facebook page, addressed emerging synthetic drug issues in radio and television outreach, and provided information on its website.

The new home of the Above the Influence brand, the Partnership at DrugFree.org, has also been committed to addressing the issue of synthetic drugs. It has worked with families such as the Rozgas to develop ways to educate parents about the dangers of synthetic drugs through events such as webcasts and in-person presentations. It also maintains a hotline through which parents can obtain information and receive referrals.

SAMHSA has also been engaged in prevention efforts. It has created guidelines for social marketing campaigns to assist communities and states seeking to reach audiences about drug abuse issues. It can also provide assistance to Federal agencies in pinpointing SAMHSA-certified laboratories that can test employees for drug use beyond the types found in traditional drug screens. Also, through its Strategic Prevention Framework State Incentive Grant (SPF-SIG), grantees around the country have conducted outreach initiatives to educate young people about the dangers of synthetic drugs. For example, the Washington, D.C., SPF-SIG created an education campaign on synthetic cannabinoids that targeted teenagers going to prom. The campaign included outreach through a website, billboards, Instagram, Facebook, and Twitter.

International Activities

While there has been strong Federal, state, and local response to the synthetic drugs that emerged in 2008 and 2009, the challenges relating to these recent formulations are not simply a domestic problem that can be solved by the United States alone. Synthetic drugs have become a major drug of abuse in numerous European and Asian countries, and they are emerging as a significant concern in Latin America and Africa. Moreover, many of the synthetic chemical substances found in the United States are made abroad, particularly in China. When ONDCP

Director Kerlikowske led an interagency delegation to Beijing in 2012, illicit movement of synthetic drugs from China was discussed with Chinese officials, including representatives in the Ministry of Public Security, the Ministry of Health, and the General Administration of Customs. While the raw components of synthetic cannabinoids and cathinones generally remain legal in China, the Chinese government has been responsive to our concerns, and our two governments are actively engaged in cooperative information sharing relating to synthetic drugs. We will continue to work with our counterparts in China on bilateral efforts to reduce the flow of synthetic drugs from China to the United States.

Director Kerlikowske also travelled to Vienna, Austria, in June of this year to mark the release of the United Nations Office on Drugs and Crime's 2013 World Drug report, which focused on the international prevalence of synthetic drugs.¹⁶

The U.S. State Department has been actively involved in the international response to synthetic drugs, particularly through its deliberations with countries where synthetic drug products are manufactured, as well as guiding U.S. membership on international bodies such as the G8 and the United Nations Commission on Narcotic Drugs (CND), the central policymaking body within the United Nations dealing with drug-related matters. The CND has enacted resolutions in the last several years specifically focused on the issue of synthetic drugs. For example, this year the CND enacted resolution 56/4, which promoted the enhancement of international cooperation in the identification and reporting of synthetic drugs.¹⁷ Pursuant to this resolution, the United Nations Office on Drugs and Crime implemented an early warning advisory system that will monitor synthetic drugs at the global level.

U.S. Customs and Border Protection (CBP) is also involved at the international level. In addition to interdicting synthetic drug products headed to the United States, CBP is working with its counterparts in partner governments in the Border Five Group – a group made up of customs agencies of the United States, Australia, Canada, New Zealand, and the United Kingdom – on joint activities designed to determine emerging synthetic drug trends and their flow between countries.

Conclusion

We continue to work with youth, parents, educators, and our Federal, state, local, tribal, and international partners to reduce synthetic drug use in America. Due to the international complexity and constantly changing formulations of these substances, no single approach alone will yield lasting results. Confronting synthetic drug use in America must combine legislation, education, enforcement, diplomacy, and scientific research.

¹⁶ The World Drug Report is available here:

http://www.unodc.org/unodc/secured/wdr/wdr2013/World_Drug_Report_2013.pdf; The United Nations Office on Drugs and Crime also released a report on synthetic drugs in March 2013 entitled *The Challenge of New Psychoactive Substances*. Available: http://www.unodc.org/documents/scientific/NPS_2013_SMART.pdf

¹⁷ Commission on Narcotic Drugs resolution 56/4 (2013). Available:

<https://www.unodc.org/documents/commissions/CND-Res-2011to2019/CND-Res-2013/CND-Res-56-4.pdf>

Thank you for the opportunity to testify here today, and for your ongoing commitment to this issue. I look forward to continuing to work with you on this pressing public health matter.