

Substance Abuse Trends **Alert!**

FADAA
FLORIDA ALCOHOL & DRUG ABUSE ASSOCIATION
JULY 2018

Novel Psychoactive Substance-Related Health Difficulties Emerging in 2018

NPS in 2018

Life-threatening bleeding has been found associated with synthetic cannabinoids' use, the Centers for Disease Control and Prevention (CDC) [warned](#) April 5, 2018. Any synthetic marijuana purchased since March 1, 2018 should not be used according to the CDC.

Synthetic cannabinoids are manufactured chemicals that some individuals use as marijuana alternatives. These substances are most commonly known as "synthetic marijuana," "spice," and "K2." The CDC warns, however, that "consumption of any synthetic marijuana poses health risks and should be avoided." Individuals smoking such products can react with vomiting, bleeding, rapid heart rate, agitation, hallucinations or confusion.

The CDC warning advises immediate transport to a hospital or calling 911 if severe, unexplained bleeding or bruising appears after using an NPS. According to the advisory, persons with such symptoms should tell their health care providers about the possible link between the symptoms and NPS use.

As of April 14, 2018, the [Illinois Department of Public Health \(IDPH\)](#) had received reports of 126 cases of bleeding in 11 different counties across the state - including three deaths from synthetic cannabinoids. Many cases required hospitalization for symptoms such as coughing up blood, blood in the urine, severe bloody nose, and/or bleeding gums. According to an IDPH [department report](#), some individuals tested positive for brodifacoum, a lethal anticoagulant often used as a rodenticide, or rat poison. The CDC [warning](#) indicates that other states have reported similar cases to those in Illinois.

These synthetic cannabinoids are part of a larger category called novel (or "new") psychoactive substances (NPS). The rapid emergence of the current outbreak in Illinois in some ways resembles the outbreak of alpha PVP sold as "flakka" in Broward County in 2014. That could mean that the international manufacturers of illicit drugs will continue to produce modified

versions of known illicit drugs and to manipulate chemical formulas to create NPS that may not currently be identified as scheduled drugs. NPS are often unregulated and may be sold under established colloquial or brand names as described earlier. NPS are purposefully designed to enter a gray area of the market producing effects resembling those of known illegal drugs but skirting the technical definitions of illegality based on chemical structure.

Federal Efforts to Identify NPS

There is an organized response to this onslaught of potentially dangerous NPS. Through a partnership, the Organized Crime Drug Enforcement Task Force (OCDETF) in the Department of Justice, the Centers for Disease Control and Prevention (CDC), and NMS Labs of Philadelphia PA are analyzing, identifying, and characterizing drug samples intercepted upon entry into the United States. The Drug Enforcement Administration (DEA) publishes reports on emerging threats on a quarterly basis as well as publishing an annual report. Figure 1 shows that [DEA's Fourth Quarter 2007 Emerging Threat Report](#) found that fentanyl-related substances were the largest component of NPS seizures then, with other opioids and analgesics, synthetic cannabinoids, and cathinones also making up notable proportions of seized drugs.

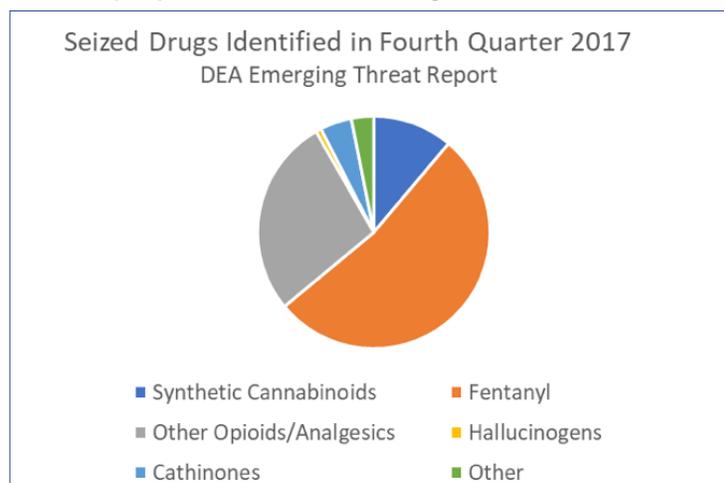


Figure 1: Substances identified in Fourth Quarter 2017 DEA [Emerging Threat Report](#)

Since the beginning of 2018, NMS Labs has identified several NPS not previously characterized. As such, they have no “street name”, but may be marketed as substitutes for known, but banned substances. As shown in Table 1, these substances include fentanyl analogs, precursors to fentanyl production, other opioids, hallucinogens, synthetic cannabinoids, phenethylamines, and cathinones.

However, not every new substance may be detected when it enters the United States. For that reason, recognition and reporting at the local level are equally important. Florida’s system of [Poison Control Centers](#) is a key resource for Floridians who suspect adverse health effects from someone’s use of a product that might include an NPS. These centers are familiar with the toxic effects of legal and illicit drugs and can be reached through this toll-free number: 1-800-222-1222.

Name	Abbreviation	Category	Effects
4-Methylmethcathinone	4-MDEC	substituted cathinone	stimulant
Adamantyl -CHIMINACA	ACHIMINACA	synthetic cannabinoid	psychoactive effects similar to THC
U-48800	none	novel opioid – benzamide class	effects similar to heroin and fentanyl
<i>Ortho</i> -Methylmethoxyacetylfentanyl	none	novel opioid – fentanyl analogue	effects similar to fentanyl
Despropionyl 3-Methylfentanyl	none	fentanyl precursor analogue	resembles precursor used in fentanyl production
Despropionyl <i>ortho</i> -Methylfentanyl	<i>ortho</i> -Methyl 4-ANPP	fentanyl precursor analogue	resembles precursor used in fentanyl production
25E-NBOH	none	phenethylamine	stimulant and hallucinogenic
<i>N</i> -Acetyl 25I-NBOMe	none	phenethylamine	stimulant and hallucinogenic

Table 1: Examples of Novel Psychoactive Substances Identified Since 1/1/2018* in Seized Samples Entering the United States
The source of this information is individual reports on each substance received from Barry Logan, Ph.D, F-ABT at [NMS Labs](#)

Preventing Outbreaks of NPS in Florida

Florida law provides an opportunity to prevent an outbreak like the one in Illinois. According to the [National Alliance for Model State Drug Laws](#), Florida’s Attorney General may temporarily schedule a substance into Schedule I when such a classification is “necessary to avoid an imminent hazard to the public safety.” This classification remains in effect until it is permanently adopted by the Legislature, repealed, declared invalid, or until June 30 of the following year if the Legislature has not permanently classified the drug as Schedule I. Therefore, the type of information derived from the collaboration among OCDETF, CDC, and NMS can be extremely valuable in suppressing sales of these novel psychoactive substances quickly in Florida.

For More Information

DEA’s annual and quarterly [Emerging Threat Reports](#) are archived at the website of the National Drug Early Warning System (NDEWS) established by the Center for Substance Abuse Research at the University of Maryland. The [NDEWS](#) also archives annual reports from the National Forensic Laboratory Information System.



This product is supported by the Florida Department of Children and Families’ Office of Substance Abuse and Mental Health.