INFORMATION FOR EWS
August 2023

(Prepared by the Forensic Sciences Centre)

Background

Synthetic cannabinoids (SCs) are substances synthesized in laboratories that mimic the biological effects of delta-9-tetrahydrocannabinol (THC), the main psychoactive ingredient in marijuana.

SCs were introduced to the designer drug market in several European countries as ‘‘herbal incense’’. The first encounter in the United States by the United States Customs and Border Protection (CBP) was in November 2008. Since then, the popularity of SCs as product adulterants and objects of abuse has increased as evidenced by law enforcement seizures, public health information, and media reports.

In recent years, various products containing synthetic cannabinoids laced on plant material have been encountered by law enforcement and are smoked for their psychoactive effects.

MDMB-4en-PINACA and 4F-MDMB-BUTICA are synthetic cannabinoids that have been encountered on the designer drug market and have been found laced on plant material and marketed under the guise of herbal incense products.

Use and Pattern of Abuse

As noted by DEA and CBP, SC’s originate from foreign sources, such as China. Substances in bulk powder form are smuggled via common carrier into the United States and find their way to clandestine designer drug product manufacturing operations located in residential neighborhoods, garages, warehouses, and other similar destinations throughout the country.

The designer drug products laced with SCs, are often sold under the guise of *‘‘herbal incense’’* or *‘‘potpourri,’’* using various product names, and are routinely *labeled ‘‘not for human consumption.’’* Additionally, these products are marketed as a *‘‘legal high’’* or *‘‘legal alternative to marijuana’’* and are readily available over the internet, in head shops, or sold in convenience stores in the US.

There are incorrect assumptions that these products are safe, that these are synthetic forms of marijuana.

The powder form of SCs is typically dissolved in solvents (*e.g.,* acetone) before being applied to plant material, or dissolved in a propellant intended for use in electronic cigarette devices.

According to law enforcement encounters, spraying or mixing the SCs with plant

material provides a vehicle for the most common route of administration— smoking (using a pipe, a water pipe, or rolling the drug-laced plant material in cigarette papers).

Medical Reporting

These SC's have no accepted medical use in treatment and have no other commercial uses and have been encountered in numerous synthetic cannabinoid products that are smoked for their psychoactive effects.

Emergency department presentations involving these substances have included seizures, sudden collapse, involuntary muscle spasms, jerking movements, catatonia, and increased violence. Multiple deaths have been reported involving MDMB-4en-PINACA, 4F-MDMB-BUTICA.

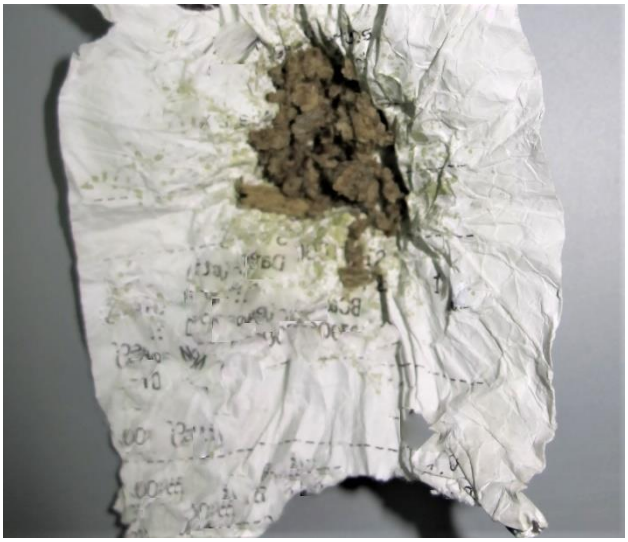
Within the US SCs that have pharmacological effects similar to the schedule I hallucinogen THC and other temporarily and permanently controlled schedule I SCs. With no approved medical use and limited safety or toxicological information, MDMB-4en-PINACA, 4F-MDMB-BUTICA, have emerged in the designer drug market, and the abuse of these substances for their psychoactive properties is concerning.

From literature, a total of 4 deaths with confirmed exposure to **MDMB-4en-PINACA** were reported by the United Kingdom (3) and Sweden (1). The cases occurred between 2019 and 2020.

4-Fluoro MDMB Butica was first identified in the US in May 2020. 11 deaths were caused by drug between May and August 2020 in Hungary.

Status within Barbados

An unknown substance was submitted to the Forensic Sciences Centre on 03 August 2023 by a representative of NCSA and **tested positive for MDMB 4en PINACA and 4-Fluoro MDMB Butica two synthetic Cannabinoids** (two chemicals listed as new psychotropic substances (NPS)) detected by GC-MS using SWGDRUG library.



Recommendations

FSC remains on high alert for NPS and share information with members of EWS.

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