



2015 Advisory #6

Increase in synthetic cannabinoid (marijuana)-related adverse events and emergency department visits, New York City

April 17, 2015

The New York City Department of Health and Mental Hygiene identified geographically-clustered increases in the number of emergency department (ED) visits related to synthetic cannabinoids (synthetic marijuana). Individuals have experienced severe adverse events after suspected ingestion of synthetic cannabinoids. ED visits related to synthetic cannabinoids sharply increased beginning April 8, with more than 120 cases identified through April 15-- more than six times the number of average weekly visits in 2015. The largest neighborhood-specific increases have been observed among residents of East Harlem, with smaller increases also noted among residents of Upper Manhattan, and Central Brooklyn.

Clinical information

- Synthetic cannabinoids are often referred to by different names, including: K2, Spice, Green Giant, Caution, Red Giant, Wicked X, AK-47, Geeked Up, Smacked, synthetic marijuana, or legal marijuana.
- Signs and symptoms of synthetic cannabinoid use include agitation, anxiety, nausea, vomiting, high blood pressure, tremor seizures, hallucinations, paranoia, and violent behavior. These effects can be similar to those of phencyclidine (PCP).
- Synthetic cannabinoids are not detected by standard urine toxicology screens; therefore, synthetic cannabinoid exposure should not be ruled out based on negative screening results. Consult your laboratory or New York City Poison Control Center for preferred testing of patient specimens.
- Because the exact compounds contained in synthetic cannabinoid products change frequently, risks and adverse consequences are unpredictable.
- No antidote is presently available for synthetic cannabinoid intoxication; however, symptoms are usually short-lived and self-limited.
- Treatment of agitation and restlessness with benzodiazepines is an acceptable and effective intervention. Diphenhydramine has been used with some success in reversing dystonic reaction and muscle rigidity.
- Scientific evidence for treatment of chronic dependent use is lacking, but motivational counseling and cognitive behavioral therapy might be effective.

Legal information

- It is illegal in New York State to possess, sell, offer to sell, or manufacture synthetic cannabinoids.¹ Stores in possession of synthetic cannabinoids can be fined \$250 per packet. Continuing or repeat violation may result in closure of the retail establishment. A person or business ordered by the Health Department to stop selling synthetic cannabinoids may face other civil and/or criminal penalties for violating the order.

¹ Part 9 of the NY State Sanitary Code (10 NYCRR Chapter 1) states "It shall be unlawful for any individual or entity to possess, manufacture, distribute, sell or offer to sell any synthetic phenethylamine or synthetic cannabinoid or product containing the same"

Health care and social service providers should be aware of the recent increases in adverse events associated with synthetic cannabinoids in New York City. Many users report choosing synthetic cannabinoids because of perceived safety and legal status. You can educate your patients about the undesirable effects of synthetic cannabinoids and their illegal status. Educational poster and information are available at nyc.gov/health (search “synthetic marijuana”). Drug treatment locators are available at: www.oasas.ny.gov. Referrals for treatment are available at 1-800-LIFENET.

We would like to remind medical providers that they are required to report suspect or confirmed cases of poisoning (including overdose) by drugs or other toxic agents within 24 hours to the Poison Control Center at 1-800-222-1222 or 212-764-7667 (POISONS). These reports are critical in detecting and preventing overdose outbreaks.

Please share this with any providers you know working with substance users in New York City.

Sincerely,

Hillary Kunins, MD, MPH

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Assistant Commissioner

Bureau of Alcohol and Drug Use-Prevention Care and Treatment