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

July 27, 2014

The New York City Department of Health and Mental Hygiene was notified that, during the past three days, fifteen individuals in East Harlem, Central Harlem, and Chelsea experienced severe adverse events after suspected ingestion of synthetic cannabinoids. This occurred in the context of a 220% increase in the number of synthetic cannabinoid-related emergency department (ED) visits during the first six months of 2014.

Clinical information

- Synthetic cannabinoids are often referred to by different names, including: K2, Spice, Green Giant, Geeked Up, Caution, Smacked, Wicked X, AK-47, 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 for preferred testing methods.
- 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.
- 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

¹Public Health Law Section 225, Title 10, Part 9 states “It shall be unlawful for any individual or entity to possess, manufacture, distribute, sell or offer to sell any synthetic phenylethylamine or synthetic cannabinoid or product containing the same”
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. Drug treatment locators are available at: www.oasas.ny.gov. Referrals for treatment are available at 1-800-LIFENET.

**ED providers should be aware of the recent increases in adverse events associated with synthetic cannabinoids in New York City.** 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**

Hillary Kunins, MD, MPH
Assistant Commissioner
Bureau of Alcohol and Drug Use Prevention, Care and Treatment

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