



To: Physicians, Nurses, and Other Health Care Providers in American Samoa
From: Ron Kirschner, MD
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Subject: Update on Synthetic Cannabinoids
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- Marijuana substitutes consisting of plant material sprayed with various synthetic cannabinoids (SCs) have become increasingly popular over the past few years.
- These are often sold on the internet as incense or potpourri under brand names such as “Spice” or “K2” and labeled “not for human consumption”, though users typically smoke them.
- Besides stronger cannabinoid agonist effects compared with plant marijuana, these newer generation SCs may have other pharmacologic properties, and products may contain additional substances.
- In 2011, five specific SCs were made Schedule I drugs by the DEA (others were later added). However, newer SCs continue to become available.
- In 2012, an outbreak of acute kidney injury, sometimes requiring dialysis, was linked to use of products containing the synthetic cannabinoid XLR-11 or its metabolites.
- Recently in Colorado, there have been increasing reports of agitation, seizures, and severe CNS depression following use of SC products with labels such as “Crazy Clown” and “Dead Man Walking”.
 - The CDC is currently investigating these cases and 3 fatalities that may be linked to SCs.
- Last month in Nebraska, a patient had CNS depression requiring endotracheal intubation after reportedly abusing “Crazy Clown”. No other coingestants were identified and the patient recovered.
- The mainstay of treatment for SC intoxication remains supportive care including:
 - Airway support if clinically indicated
 - Benzodiazepines for agitation or seizures
 - Routine chemistries along with additional testing as needed to identify other causes of altered mental status
- Synthetic cannabinoids will not be detected by standard urine drug screens. Specialized reference labs may be able to identify some SCs, but results won’t be available in real time.
- **In American Samoa, health care professionals and the public can reach the Poison Center by calling 1-800-222-1222.**

References

CDC. Acute kidney injury associated with synthetic cannabinoid use – multiple states, 2012. *MMWR Morb Mortal Wkly Rep* 2013 Feb 15; 62: 93.
Whitney, “Synthetic marijuana prompts CO health investigation,” NPR 9/13/13 (accessed at npr.org 9/14/13).
Wilson, “3 deaths may be tied to synthetic marijuana in CO,” CNN 9/7/13 (accessed at cnn.com 9/14/13).

Our trained staff of nurse and physician assistant specialists in poison information and physician toxicologists is available 24 hours a day to answer your questions.