

## Health Advisory:

### K2 Synthetic Marijuana Use Among Teenagers and Young Adults in Missouri

March 5, 2010

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DIRECTOR**

**SUBJECT: K2 Synthetic Marijuana Use Among Teenagers and Young Adults in Missouri**

Health care providers should be aware of serious signs and symptoms reported among some users of “K2” synthetic marijuana product, which is legal and readily obtainable in Missouri. Providers should note that use of this substance, alone or in combination with other substances, may cause symptoms including anxiety coupled with agitation, tachycardia, elevated blood pressure, pallor, vomiting, tremors, hallucinations, and possibly seizures. Clinical consultation is available from the Missouri Regional Poison Center at 1-800-222-1222 (24/7).

“K2” – also known as “K2 Spice”, “Spice”, “K2 Summit”, “Genie”, “Zohai”, and various other names – is an unregulated mixture of dried herbs that are sprayed with a synthetic cannabinoid-like substance (likely a compound designated “JWH018”). “K2” is sold as incense.

“K2” is currently legal in Missouri, although some communities have banned its sale, and it is readily available for purchase from gas stations, smoke shops and other retailers in many parts of the state. The product is also widely available on the Internet.

Since February 8, 2010, the Missouri Regional Poison Center has received questions from numerous emergency department (ED) physicians in Missouri regarding management of patients who had adverse reactions after smoking “K2.” Patients were 14 to 21 years of age. Some calls were also received from the public regarding exposure to this substance.

Apparent “K2”-related ED visits reported via the Missouri Department of Health and Senior Services’ ESSENCE system since December 8, 2009, included many of those which had prompted calls by health care providers to the Poison Center. Additional ED visits with similar complaints that had not resulted in calls to the Poison Center were also identified by ESSENCE. From December 8, 2009, through February 25, 2010, 10 ED visits that could have been K2-associated were detected. Patients identified thus far have ranged in age from 16 to 27 years, and nine were non-Hispanic white males. One patient was a female of unknown race.

It is important to note that among 10 ED visits detected in ESSENCE, only three mentioned “K2” as their admission reason or chief complaint. This suggests that although “K2” is legal in Missouri, patients may not be forthcoming about its use when seeking health care, a finding consistent with provider reports in other states, including New Jersey, Massachusetts, and Michigan.

Signs and symptoms reported to the Poison Center have included:

- tachycardia (in the range of 110 to 150 beats per minute),
- elevated blood pressure (in the 140-160/100-110 range),
- anxiety,
- pallor,
- numbness and tingling,
- vomiting,
- agitation (which can be severe and require sedation),
- hallucinations (which can be intense),
- and, in some cases, tremors and seizures

Based on the signs and symptoms reported, the Missouri Regional Poison Center is concerned that the “K2” may be contaminated with other unrecognized chemicals, in addition to the synthetic cannabinoid-like substance. Also, “K2” is reportedly being used together with other legal and illegal substances. These factors may complicate patient evaluation and management for health care providers.

Currently, the Missouri Regional Poison Center is recommending the following:

- Ask about “K2” use in patients presenting for care with compatible symptoms (anxiety coupled with agitation, tachycardia, elevated blood pressure, pallor, vomiting, tremors, hallucinations, and possibly seizures).
- Be aware that JWH018 does NOT cross-react with delta-9-tetrahydrocannabinol (THC) on the standard urine immunoassay (UDS) tests that EDs or reference laboratories use for comprehensive drug screens.
- Whenever necessary, clinical consultation should be sought from the Poison Center at **1-800-222-1222**. The Poison Center is staffed 24 hours a day, 7 days a week, and is free of charge.

This Health Advisory was written in collaboration with the Missouri Regional Poison Center.