Synthetic Marijuana Linked to Cases of Severe Bleeding in Illinois and Indiana

Illinois public health officials have linked synthetic marijuana use to cases of vitamin K dependent coagulopathies (bleeding). Since March 10, 16 cases have been reported in Illinois, and one case was reported in Indiana on March 27. Patients did not have a history of taking warfarin or any exposures to brodifacoum-containing rat poisons (both are common causes of these presentations), yet had INR values ranging from 6 to greater than 20 on presentation (much higher than the reference value of 1 and is considered life-threatening).

Cases had prolonged hospitalization due to elevated INR values despite fresh frozen plasma (FFP) and intravenous vitamin K. The length of time and clinical treatment necessary to control the coagulopathy suggests a long-acting vitamin K antagonist, or “superwarfarin,” as the cause of the clinically significant bleeding exhibited by these patients. Several cases in Illinois were discharged but returned to the emergency department because they were not diagnosed or improved on vitamin K for fresh frozen plasma therapy and were weaned too soon.

All cases have reported using synthetic marijuana prior to illness. The effects of synthetic marijuana, commonly known as fake pot, fake weed, legal weed, spice, K2, KD, Mind Trip, OMG, Black Giant, Matrix, Scooby Snacks, AK-47, Genie, and others, can be unpredictable and sometimes life-threatening.

**Recommendations:**

- Health care providers and health departments caring for or investigating unusual cases of bleeding—such as bloody nose or hematuria-- should inquire about potential exposures to synthetic marijuana (including sites of purchase), and conduct INR testing.
- Until the specific products involved are identified, health care providers should conduct INR testing on any patients with recent synthetic marijuana use even if those patients have not had any abnormal bleeding.
- Providers should also identify alternative sources of vitamin K supplies if needed.
An investigation of this outbreak is currently ongoing. **If a suspect case of coagulopathy is identified, please interview the patient using the attached questionnaire and report the case immediately to Mandy Billman, Overdose Surveillance Educator Epidemiologist, Indiana State Department of Health Epidemiology Resource Center, at 317-232-3190.** To report a case after hours, please call 317-233-1325 (normal ISDH hours of operation are 8:15 a.m.-4:45 p.m. EDT, Monday-Friday). Please fax questionnaires to Mandy Billman at 317-234-2812.

For questions regarding treatment and patient management, please contact the Indiana Poison Center at 800-222-1222.