To: Buncombe County Medical Providers  
From: Dr. Jennifer Mullendore, Medical Director  
Date: July 31, 2018  
RE: Health Alert from Buncombe County Department of Health- Life-threatening coagulopathy associated with the use of synthetic cannabinoids.

Please see the attached Provider Memo regarding **life-threatening coagulopathy associated with the use of synthetic cannabinoids**. The attached CDC Health Advisory contains additional information and recommendations.

Three cases of vitamin K-dependent coagulopathy in patients who reported using synthetic cannabinoids have been reported to the NC Division of Public Health (DPH) since June 2018. There is currently a multistate outbreak of severe coagulopathy associated with synthetic cannabinoids use. As of July 13, 2018, 11 states had reported at least 250 cases, including 6 deaths, to the CDC. Brodifacoum, a long-acting vitamin K-dependent antagonist that is used as rat poison, has been detected in case-patients’ drugs and biological samples.

Patients with Vitamin K-dependent coagulopathy may first present to primary care providers, emergency departments, or urgent care clinics with any these symptoms: bruising, nosebleeds, excessively heavy menstrual bleeding, hematemesis, hemoptysis, hematuria, flank pain, abdominal pain, and bleeding gums or mouth.

**Recommendations for clinicians**

- If a patient presents with signs or symptoms consistent with Vitamin-K dependent coagulopathy:
  1. Contact the Carolinas Poison Center at 1-800-222-1222 to report the case and discuss the treatment and management of the patient.
  2. Ask the patient if they have used synthetic cannabinoids within the last 3 months. Other names include K2, Spice, synthetic marijuana, and fake weed/legal weed.
- Even in the absence of signs and symptoms of coagulopathy, if the patient reports synthetic cannabinoids use or you suspect use, check the patient's INR before releasing them.

**Reporting**

- To report any similar cases, or if you have questions about treatment and management of these cases, please contact the Carolinas Poison Center at 1-800-222-1222.
- If you have questions about the ongoing outbreak, please contact the NC DPH at 919-695-2662.