

Recommendations for Clinicians (From Centers for Disease Control)

1. Maintain a high index of suspicion for vitamin K-dependent antagonist coagulopathy in patients with a history or suspicion of using synthetic cannabinoids. Patients may present with clinical signs of coagulopathy, bleeding unrelated to an injury, or bleeding without another explanation. Some patients may be asymptomatic or present with complaints unrelated to bleeding but have numerical coagulopathy. NOTE: Some patients may not divulge synthetic cannabinoids use.
2. Ask all patients about history of illicit drug use. All high-risk patients (e.g., those reporting synthetic cannabinoids use or those who are suspected of synthetic cannabinoids use within the last three months), regardless of their presentation, should be screened for vitamin K-dependent antagonist coagulopathy by checking their coagulation profile (e.g., INR).
3. Possible cases should be asked if they have recently donated plasma or blood (e.g., in the last three months). Clinicians treating possible cases who have recently donated plasma or blood should notify their state health department, who can then notify the FDA.
4. Proceduralists (e.g., trauma/general/orthopedic/oral/OB-GYN/cosmetic surgeons, dentists, interventional cardiologists/radiologists, and nephrologists) should be aware that patients with a history of using synthetic cannabinoids may be anti-coagulated without clinical signs of coagulopathy. These patients should be screened for vitamin K-dependent antagonist coagulopathy **prior** to their procedure.
5. Patients sent home from surgeries or other procedures that could result in bleeding should be told not to use synthetic cannabinoids because of the risk that the product may be contaminated with an anticoagulant.
6. Contact your local poison control center (1-800-222-1222) for questions on diagnostic testing and management of these patients.
7. Promptly report possible cases to your local or state health department.

Recommendations for the Public

CDC recommends that people do not use synthetic cannabinoids. Synthetic cannabinoids are always dangerous because it is impossible for people to know what chemicals are in the product, how much they are being exposed to, and how their body will react to the chemicals. The synthetic cannabinoid products associated with this outbreak are especially dangerous because they contain brodifacoum, a chemical used as rat poison that can cause uncontrolled bleeding.

2. People who have used synthetic cannabinoids in the past three months and are concerned about their health should contact their healthcare provider. Synthetic cannabinoids users who develop any unusual bruising or bleeding should seek medical attention immediately.

For More Information

- Synthetic cannabinoids: What are they? What are their effects?
<https://www.cdc.gov/nceh/hsb/chemicals/sc/default.html>
- Synthetic cannabinoids: An Overview for Healthcare Providers
<https://www.cdc.gov/nceh/hsb/chemicals/sc/healthcare.html>
- CDC Clinical Outreach and Communication Activity: Outbreak Alert Update: Potential Life-Threatening Vitamin K-Dependent Antagonist Coagulopathy Associated With Synthetic Cannabinoids Use.

<https://emergency.cdc.gov/coca/clinicalaction/2018/index.asp>