

**PENNSYLVANIA DEPARTMENT OF HEALTH**

**2018– PAHAN –404 –04-10- ADV**

**Potential Life-Threatening Vitamin K-Dependent Antagonist  
Coagulopathy Associated With Synthetic Cannabinoids Use**

<b>DATE:</b>	April 10, 2018
<b>TO:</b>	Health Alert Network
<b>FROM:</b>	Rachel Levine, MD, Secretary of Health
<b>SUBJECT:</b>	<b>Potential Life-Threatening Vitamin K-Dependent Antagonist Coagulopathy Associated With Synthetic Cannabinoids Use</b>
<b>DISTRIBUTION:</b>	Statewide
<b>LOCATION:</b>	Statewide
<b>STREET ADDRESS:</b>	n/a
<b>COUNTY:</b>	n/a
<b>MUNICIPALITY:</b>	n/a
<b>ZIP CODE:</b>	n/a

**This transmission is a “Health Advisory” provides important information for a specific incident or situation; may not require immediate action.**

**HOSPITALS: PLEASE SHARE WITH ALL MEDICAL, PEDIATRIC, INFECTION CONTROL, NURSING AND LABORATORY STAFF IN YOUR HOSPITAL; EMS COUNCILS: PLEASE DISTRIBUTE AS APPROPRIATE; FQHCs: PLEASE DISTRIBUTE AS APPROPRIATE LOCAL HEALTH JURISDICTIONS: PLEASE DISTRIBUTE AS APPROPRIATE; PROFESSIONAL ORGANIZATIONS: PLEASE DISTRIBUTE TO YOUR MEMBERSHIP**

The Pennsylvania Department of Health is releasing the following information, modified from the Centers for Disease Control and Prevention (CDC) Clinician Outreach and Communication Activity.

- From March 10, 2018 through April 5, 2018, 94 people in 5 states (Illinois, Indiana, Maryland, Missouri, and Wisconsin) have presented to Emergency Departments with serious unexplained bleeding. Two have died.
- Most patients reported use of synthetic cannabinoids (such as K2, Spice, or AK47).
- The long-acting anti-coagulant brodifacoum (found in some rat poisons) has been detected in several patients and in at least 3 synthetic cannabinoid product samples.
- Promptly report suspect cases of unexplained serious bleeding to the Pennsylvania Department of Health Bureau of Epidemiology (717-787-3350) or your local health department. In addition, please report any similar cases encountered since February 1, 2018.
- Coroners and medical examiners are encouraged to report individuals who after death or at autopsy had signs of bleeding without an alternative diagnosis to the Pennsylvania Department of Health Bureau of Epidemiology (717-787-3350) or their local health department.

The Centers for Disease Control and Prevention (CDC) is assisting with the investigation by coordinating multistate efforts and reviewing calls to all U.S. poison information centers to identify suspect cases that may be related to the current outbreak.

**CLINICAL SIGNS OF COAGULOPATHY**

Clinical signs of coagulopathy include bruising, nosebleeds, bleeding gums, bleeding disproportionate to injury, vomiting blood, coughing up blood, blood in urine or stool, excessively

heavy menstrual bleeding, back or flank pain, altered mental status, feeling faint or fainting, loss of consciousness, and collapse.

## RECOMMENDATIONS

Maintain a high index of suspicion for vitamin K-dependent antagonist coagulopathy: Ask patients presenting with clinical signs of coagulopathy without another explanation about use of synthetic cannabinoids (e.g., K2, Spice, and AK47). Be aware that some patients may not divulge use of synthetic cannabinoids. Suspect patients should have coagulation profiles ordered (e.g., international normalized ratio (INR) and prothrombin time (PT)). Questions on diagnostic testing and management of these patients can be directed to your regional Poison Information Center (1-800-222-1222).

Evaluate hospitals' supply of vitamin K: Cost of outpatient oral vitamin K treatment can be \$8,000.00 for 2 weeks treatment, and expected treatment duration is months. Options are being explored at the national level to address these issues.

Advise patients prior to and following surgery: Patients having surgery 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.

Ask suspect patients about plasma/blood donation: Three patients in Illinois donated plasma prior to admission to hospital for treatment. Blood products donated by these patients needs to be discarded. Contact the Bureau of Epidemiology immediately if a suspect patient recently donated blood products.

Report suspected patients: Report current cases as well as any similar cases encountered since February 1, 2018 to the Pennsylvania Department of Health or your local health department as noted above.

Categories of Health Alert messages:

**Health Alert:** conveys the highest level of importance; warrants immediate action or attention.

**Health Advisory:** provides important information for a specific incident or situation; may not require immediate action.

**Health Update:** provides updated information regarding an incident or situation; unlikely to require immediate action.

This information is current as of April 10, 2018, but may be modified in the future.