

**EPI Update for Friday, April 6, 2018**  
**Center for Acute Disease Epidemiology (CADE)**  
**Iowa Department of Public Health (IDPH)**

Items for this week's EPI Update include:

- **Coagulopathies Associated with Contaminated Synthetic Cannabinoids**
- **Unusual resistance organisms widespread in the U.S.**
- **Welcome new CADE employee**
- **In the news: "Zombie-like" raccoons - Police probe calls about raccoons acting strangely in daytime**
- **In the news: Shingles is nasty, and the new vaccine works well. Why do adults avoid shots?**
- **In the news: U.S. infectious disease mortality, by county**
- **Infographic: Containment strategy – Be on guard to contain the first spark**
- **Meeting announcements and training opportunities**

**Coagulopathies Associated with Contaminated Synthetic Cannabinoids**

As of Thursday, April 5, 2018, a total of 94 cases of severe coagulopathy and bleeding associated with synthetic cannabinoid use have been reported in five states (89 cases in Illinois, two cases in Indiana, one case in Missouri, one case in Wisconsin, and one case in Maryland). Two deaths have been reported in Illinois. The first case occurred in Illinois on March 7, 2018.

These cases have used products containing synthetic cannabinoids (a.k.a. Spice, K2, legal weed, fake marijuana, synthetic marijuana, and synthetic THC). Synthetic cannabinoids can be smoked or sold as liquids to be vaporized and inhaled in e-cigarettes and other devices. The chemical brodifacoum, identified in biological samples from some patients, is widely used in pesticides (typically in rodent control) as a vitamin K antagonist anticoagulant poison. It is suspected that the brodifacoum was added to synthetic cannabinoid mixtures.

Symptoms of severe coagulopathy include: easy bruising, bleeding from the nose or gums, coughing up blood, vomiting blood, blood in the urine or stool, severe menstrual bleeding and bleeding out of proportion to an injury. Laboratory tests have found the patients' INRs to range from 6 to >20. A normal INR for a person not taking warfarin is around 1.

No cases have been reported in Iowa.

Healthcare providers are asked to take the following actions:

- If a patient presents with significant bleeding and/or an elevated INR without a definitive cause, ask if synthetic cannabinoids were used in the last three months.

- If a patient reports synthetic cannabinoid exposure or has evidence of bleeding, check the patient's International Normalizing Ratio (INR) prior to release. The INR has been elevated in some patients prior to clinical signs.
- Advise patients that if they (and/or others they know) use synthetic cannabinoids and start experiencing severe bleeding or bruising, have someone take them to the hospital immediately or call 911. Advise patients to tell their healthcare providers about the possible link between symptoms and synthetic cannabinoid use.
- To discuss treatment and management guidance for potential patients, please call the **Iowa Poison Control Center at 800-222-1222**.
- For surveillance purposes, please report suspected cases to the **Iowa Department of Public Health at 866-834-9671**.

### **Unusual resistance organisms widespread in the U.S.**

More than 23,000 Americans die each year from infections caused by organisms resistant to antibiotics. While antibiotic resistance (AR) threats vary nationwide, AR has been found in every state. And unusual resistance organisms, which are resistant to all or most antibiotics tested and are uncommon or carry special resistance genes, are constantly developing and spreading. Lab tests uncovered unusual resistance more than 200 times in 2017 in bacteria alone.

Health Care Facilities are encouraged to:

- Establish protocols to immediately notify the health care provider and infection control staff of unusual resistance.
- When unusual resistance organisms are identified:
  - Place patients with unusual resistance on contact precautions, assess and enhance infection control, and work with public health to screen others.
  - Communicate about status when patients are transferred.
  - Continue infection control assessments and colonization screenings until spread is controlled.
  - Ask about any recent travel or health care to identify at-risk patients.

For additional information visit <https://www.cdc.gov/vitalsigns/containing-unusual-resistance/> .

### **Welcome new CADE employee**

Tyra Goss BSN, RN has recently joined the CADE team as the Healthcare Associated Infections Epidemiologist. Tyra has over 20 years of clinical and three years of infection prevention experience in the acute care setting. Tyra also has experience with employee health and education, and she has served as patient representative. Tyra has relocated from southeast Iowa, please help us welcome her to CADE!

**In the news: "Zombie-like" raccoons - Police probe calls about raccoons acting strangely in daytime**

[www.cbsnews.com/news/zombie-like-raccoons-police-probe-calls-about-raccoons-acting-strangely-in-daytime-ohio/](http://www.cbsnews.com/news/zombie-like-raccoons-police-probe-calls-about-raccoons-acting-strangely-in-daytime-ohio/)

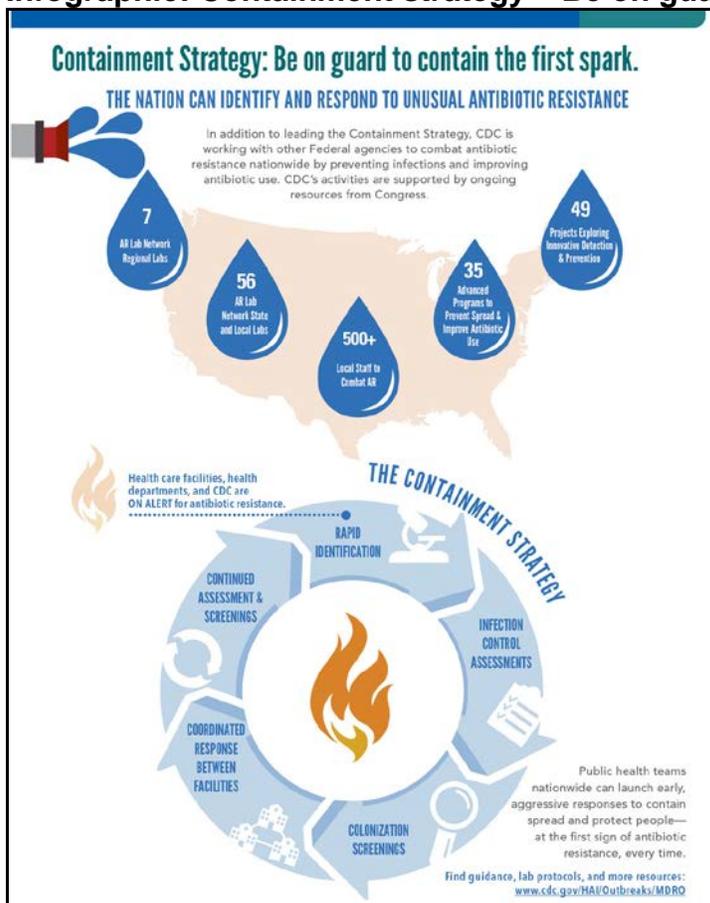
**In the news: Shingles is nasty, and the new vaccine works well. Why do adults avoid shots?**

[www.npr.org/sections/health-shots/2018/03/20/594956495/shingles-is-nasty-and-the-new-vaccine-works-well-why-do-adults-avoid-shots](http://www.npr.org/sections/health-shots/2018/03/20/594956495/shingles-is-nasty-and-the-new-vaccine-works-well-why-do-adults-avoid-shots)

**In the news: U.S. infectious disease mortality, by county**

[jamanetwork.com/journals/jama/article-abstract/2676111](http://jamanetwork.com/journals/jama/article-abstract/2676111).

**Infographic: Containment strategy – Be on guard to contain the first spark**



To view in full size, visit [www.cdc.gov/vitalsigns/containing-unusual-resistance/infographic.html#infographic](http://www.cdc.gov/vitalsigns/containing-unusual-resistance/infographic.html#infographic).

**Meeting announcements and training opportunities**

Don't forget to register for the 2018 Infection Prevention & Control Seminar coming up on May 1-2, 2018 at the Holiday Inn Des Moines – Airport/Conference

Center. You can register online at [centerforconferences.uiowa.edu/iowa-infection-prevention-and-control-seminar](https://centerforconferences.uiowa.edu/iowa-infection-prevention-and-control-seminar).

**Have a healthy and happy week!**

Center for Acute Disease Epidemiology  
Iowa Department of Public Health  
800-362-2736