Items for this week’s Epi Update include:

- Severe respiratory illnesses among teenagers who recently vaped
- Enhanced barrier precautions for nursing homes
- Tetanus is rare, but remains a threat
- In the news: Spirit Airlines passengers have a surprise bat passenger
- In the news: How mosquitoes killed billions, helped win the American Revolution
- In the news: The inflammation connection
- Infographic: Infection prevention and you
- Meeting announcements and training opportunities

Severe respiratory illnesses among teenagers who recently vaped
The Wisconsin Department of Health Services and the Illinois Department of Public Health both reported cases of severe respiratory illness among teenagers who recently vaped. As of last week, Wisconsin had received 11 reported cases with seven more under investigation. Affected persons experienced shortness of breath, fatigue, chest pain, cough and weight loss, with some requiring assistance to breathe. Illinois also reported the hospitalization of three young persons with respiratory issues after vaping. The potential link between the illnesses and vaping is still being investigated.

There have not yet been any cases reported to the Iowa Department of Public Health. Persons who experience similar symptoms should seek medical care and healthcare providers should consider asking about recent vaping in the weeks to months prior to symptom onset.


Enhanced Barrier Precautions for nursing homes
CDC has posted interim guidance to address the use of personal protective equipment and room restriction in nursing homes to contain the spread of antibiotic resistant organisms. This guidance introduces the concept of Enhanced Barrier Precautions (EBP), recommending gown and glove use for certain residents during specific high-contact resident care activities.

CDC developed this resource to assist in the management of residents colonized with novel and emerging antibiotic resistant pathogens (e.g., Carbapenemase-producing organisms or Candida auris). CDC recognized that prolonged use of Contact Precautions with room restriction for residents colonized with these organisms would not be feasible, but given the increased risk for ongoing transmission of these pathogens, wanted to offer nursing homes an alternative that provided more specific information on when to implement barriers (gown/gloves) during care of these residents.

Enhanced Barrier Precautions does not replace existing guidance for the use of Contact Precautions for other infections such as Clostridioides difficile or norovirus.
The full guidance is available at [www.cdc.gov/hai/containment/PPE-Nursing-Homes.html](http://www.cdc.gov/hai/containment/PPE-Nursing-Homes.html).

**Tetanus is rare, but remains a threat**

Since becoming a reportable disease in 1947, tetanus cases have declined more than 95% in the U.S. This decline was in part due to continued use of tetanus antitoxin for wound management and introduction of tetanus vaccines in the 1930s and 1940s. Today, tetanus is uncommon, with about 30 reported cases in the U.S. each year. Despite this reduction, seven cases of tetanus have been reported in Iowa since 2000, including three children.

*Clostridium tetani* spores are commonly found in soil, dust or manure, and usually enter the body through a wound or breach in the skin. Nearly all cases of tetanus are among people who have never received a tetanus vaccine and adults who don’t stay up-to-date on their 10-year booster shots. Vaccination and proper wound care remain important ways to prevent tetanus.

There are no confirmatory laboratory tests for tetanus. Characteristic symptoms of tetanus are painful muscular contractions, primarily of the jaw and neck muscles, and secondarily of trunk muscles. Lockjaw is a common sign of tetanus. History of an injury or apparent portal of entry may be lacking. Tetanus is a medical emergency requiring hospitalization, immediate treatment with human tetanus immune globulin, agents to control muscle spasm, aggressive wound care, antibiotics and a tetanus toxoid booster.

For more information about treatment for tetanus, visit [www.cdc.gov/tetanus/clinicians.html](http://www.cdc.gov/tetanus/clinicians.html).


In the news: The inflammation connection [www.psychiatrictimes.com/special-reports/introduction-inflammation-connection](http://www.psychiatrictimes.com/special-reports/introduction-inflammation-connection)

Infographic: Infection prevention and you
Meeting announcements and training opportunities
The NIOSH Science Blog recently posted a hypothetical scenario taking place in Iowa as part of their Workplace Medical Mystery series. The scenario describes a camp counselor who becomes ill with an unknown illness – follow the clues and try to guess the cause!

To view the Medical Mystery, visit blogs-origin.cdc.gov/niosh-science-blog/2019/07/29/medical-mystery11/.

Have a healthy and happy week!
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