

Position Statement

Protect the Public from Antibiotic Resistance

The Issue: Preventing harm from drug-resistant microbes

Antibiotic resistance, the ability of microorganisms to resist the healing effects of drugs, is a global health threat that endangers the effective prevention and treatment of many infections.¹ New resistant organisms are rapidly emerging to reduce treatment options for many common infectious diseases, resulting in prolonged illness, disability and death.² The Centers for Disease Control and Prevention estimates that at least two million illnesses and 23,000 deaths are caused by antibiotic-resistant bacteria with associated health care costs exceeding \$20 billion in the United States annually. The actual human and financial costs are likely far higher because surveillance and current data collection capabilities cannot capture the full economic burden.

Background: Closing gaps in data and monitoring

Improving data collection to track the incidence of antibiotic resistance is critical to preventing harm. White House officials issued a national action plan for combating antibiotic-resistant bacteria, outlining five major goals, including “Strengthen National One-Health Surveillance Efforts to Combat Resistance.”³ This goal is to improve, identify and monitor antibiotic resistance in humans, animals and the environment. State public health laboratories play a critical role in achieving this goal. Additionally, the CDC established the Antibiotic Resistance (AR) Lab Network to strengthen nationwide lab capacity to detect antibiotic resistance and prevent its spread. Aligning with the national action plan and the AR Lab Network, the State Hygienic Laboratory collects and tests potentially resistant organisms in Iowa, with a focus on carbapenem-resistant Enterobacteriaceae. Pursuant to Iowa Administrative Code 681 Chapter 5.1, the State Hygienic Laboratory has the responsibility to provide surveillance information, microbiological examinations and research “designed to solve practical problems and to translate basic research to improve public and environmental health.”

Solutions

Fund One-Health Surveillance Activities

- Sustain funding for the State Hygienic Laboratory to advance and standardize public health surveillance methods and data reporting.

Support Coordination for Improved Data

- Support the State Hygienic Laboratory’s efforts to coordinate antibiotic resistance surveillance efforts with other state and local public health activities by promoting the development of a statewide antibiogram, a profile of antibiotic susceptibility results of key pathogenic organisms.

Encourage Participation in National Monitoring Effort

- Encourage local facilities to submit suspected drug resistant organisms to the State Hygienic Laboratory for confirmatory testing and further studies through regional testing or national testing.

1. <https://www.cdc.gov/drugresistance/about.html>; About Antibiotic Resistance

2. <https://www.cdc.gov/drugresistance/index.html>; Antibiotic Resistance Threats in the United States, 2013

3. https://obamawhitehouse.archives.gov/sites/default/files/docs/national_action_plan_for_combating_antibiotic-resistant_bacteria.pdf; National Action Plan for Combating Antibiotic-resistant Bacteria