AR Solutions in Action

CDC's Investments to Combat Antibiotic Resistance Threats

FISCAL YEAR 2019

COLORADO \$3,026,557

Funding for AR Activities Fiscal Year 2019 One of 10 sites for the **Emerging Infections Program**

FUNDING TO STATE HEALTH DEPARTMENTS



RAPID DETECTION & RESPONSE: State, territory, and local public health partners fight antibiotic resistance in healthcare, the community, and food. Programs use the AR Lab Network to rapidly detect threats and implement prevention, response, and antibiotic stewardship to stop the spread of resistant germs.

With 2018 funding, Colorado enhanced response to AR threats by expanding testing capacity for carbapenemaseproducing organisms (CPOs), enabling expedited action to prevent spread. The state responds to every CPO detected within one business day to provide infection control recommendations to healthcare facilities for containment. Colorado detected new carbapenemases, contributing to epidemiologic understanding and prevention of antibiotic resistance in the state.



\$314.299

FOOD SAFETY projects protect communities by rapidly identifying drug-resistant foodborne bacteria to stop and solve outbreaks and improve prevention.

Colorado uses whole genome sequencing to track and monitor local outbreaks of *Listeria*, *Salmonella*, Campylobacter, and E. coli and uploads sequence data into PulseNet for nationwide monitoring of outbreaks and trends. In Fiscal Year 2020, Colorado will continue monitoring these isolates for resistance genes. When outbreaks are detected, local CDC-supported epidemiologists investigate the cases to stop spread. CDC also funds Colorado's Food Safety Center for Excellence, which provides assistance and training to other health departments to build capacity to track and investigate foodborne disease.



\$127,130

FUNGAL DISEASE projects improve our ability to track antifungal resistance and stop it from spreading.

With funding for fungal disease surveillance, Colorado increased their ability to identify fungal diseases, monitor for new and emerging resistance, and implement strategies to prevent its spread in high-risk areas. Improving detection for fungal diseases, like Candida auris, means patients receive appropriate treatment while reducing unnecessary antibiotic use.

This data represents CDC's largest funding categories for AR. It shows extramural funding that supports AR activities from multiple funding lines

AR: antibiotic resistance HAI: healthcare-associated infection

CDC provides critical support in the U.S. and abroad to protect people from antibiotic resistance.



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2019

COLORADO AR Investments (cont.)



\$807,511

GONORRHEA RAPID DETECTION & RESPONSE works with state and local epidemiology and laboratory partners to test for and quickly respond to resistant gonorrhea to stop its spread in high-risk communities. Only one treatment option remains for gonorrhea and resistance continues to grow.

Between July 2018–June 2019, the Colorado SURRG project completed testing for about 25% of the more than 2,700 gonorrhea cases reported in Denver County. They identified 71 samples that did not respond optimally to recommended antibiotics, and grantees adhered to protocols for following up with those patients and their sex partners. To help inform national treatment guidelines for gonorrhea, Colorado also participates in the Gonococcal Isolate Surveillance Project (GISP), testing how well antibiotics work on laboratory samples from sentinel STD clinics.



EMERGING INFECTIONS PROGRAM (EIP) sites improve public health by translating population-based surveillance and research activities into informed policy and public health practice.

CDC's EIP network is a national resource for surveillance, prevention, and control of infectious diseases. For example, the EIP in Colorado performs population-based surveillance for candidemia, *C. difficile*, and resistant Gramnegative bacteria; conducts HAI and antibiotic use prevalence surveys; develops surveillance for non-tuberculous mycobacteria; and participates in a collaboration with CDC Prevention Epicenters. <u>Learn more: www.cdc.gov/hai/eip</u>

Page 2 of 2. This data represents CDC's largest funding categories for A.P. It shows outcoming Indian that supports A.P. activities from multiple funding that

AR: antibiotic resistance HAI: healthcare-associated infection

