AR Solutions in Action

CDC's Investments to Combat Antibiotic Resistance Threats

FISCAL YEAR 2018

KANSAS \$1,095,079



Funding for AR Activities Fiscal Year 2018

FUNDING TO STATE HEALTH DEPARTMENTS



RAPID DETECTION AND RESPONSE to novel or high-concern drug-resistant germs is critical to contain the spread of these infections.

With 2017 funding, Kansas identified novel cases of "nightmare bacteria" CRE, including several patients infected with an IMP-27 producing CRE (an enzyme that can make powerful antibiotics ineffective). Kansas partnered with CDC and the University of Ohio for environmental sampling on a small cattle farm to identify potential sources of exposure. This was the first time an IMP-27 was detected on a small cattle farm.

HAI/AR PREVENTION works best when public health and healthcare facilities partner together to implement targeted, coordinated strategies to stop infections and improve antibiotic use.

With 2017 funding, Kansas partnered with their state's CMS-funded Quality Improvement Organization to prevent infections and improve care in long-term care facilities by providing access to the Long-Term Care Certificate Program from the Association for Professionals in Infection Control and Epidemiology (APIC).



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

Kansas 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 2019, Kansas will begin simultaneously monitoring these isolates for resistance genes. When outbreaks are detected, local CDC-supported epidemiologists investigate the cases to stop spread.

FUNDING TO UNIVERSITIES & HEALTHCARE PARTNERS



IMPEDx DIAGNOSTICS, INC.: Discovering & Implementing What Works

The best approach to countering the spread of antibiotic-resistant gonorrhea is to treat patients quickly with effective antibiotics. ImpeDx Diagnostics, Inc. will develop a rapid system to provide phenotypic antibiotic susceptibility testing results for gonorrhea directly from clinical samples in order to identify the preferred antibiotic for treatment of the individual, potentially reducing the time of infection, improving public health response, and reducing the incidence of antibiotic resistance.

Page 1 of 1 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

