# AR Solutions in Action

CDC's Investments to Combat Antibiotic Resistance Threats Nationwide

# MISSOURI \$1,735,060

Funding for AR Activities Fiscal Year 2017

### FUNDING TO STATE HEALTH DEPARTMENTS



**RAPID DETECTION & RESPONSE to emerging drug-resistant germs is critical to contain the spread of these infections.** With 2016 funding, Missouri increased its capacity to detect and respond to emerging threats by building critical relationships between state labs, the HAI/AR program and the AR Lab Network. The HAI/AR program also worked with local healthcare partners to enhance outbreak reporting for faster and more complete detection.



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.

Missouri received funding for this activity for the first time in 2017 to better prevent infections and protect patients.



\$78,772

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

In Fiscal Year 2018, Missouri will ramp up testing to include whole genome sequencing of all *Listeria*, *Salmonella*, *Campylobacter* and *E. coli* isolates and simultaneously monitor these isolates for resistance genes. States upload the sequence data into PulseNet for nationwide monitoring of outbreaks and trends. When outbreaks are detected, local CDC-supported epidemiologists investigate the cases to stop spread.

### **FUNDING TO UNIVERSITIES & HEALTHCARE PARTNERS**



#### WASHINGTON UNIVERSITY: CDC Prevention Epicenter

A unique research program in which CDC collaborates with medical academic investigators to conduct innovative infection control and prevention research in healthcare settings. For example, one of the Washington University projects will determine if certain microbiome characteristics are associated with recurrent urinary tract infections caused by drug-resistant germs, and whether intervention on the microbiome can reduce these drug-resistant infections.



#### WASHINGTON UNIVERSITY: Microbiome Assessment & Intervention

Researchers will assess the risks and benefits of *C. difficile* treatment compared to a placebo treatment. Researchers will determine the impact of oral antibiotics on the microbiome, antibiotic resistance, *C. difficile* and colonization of a multi-drug resistant organism, healthcare environment contamination, duration of diarrhea and outcomes. Learn more: www.cdc.gov/hai/epicenters.

Page 1 of 1 This data represents CDC's largest funding categories for AR. It shows domestic, extramural funding that supports AR activities from multiple funding lines. AR: antibiotic resistance HAI: healthcare-associated infection

CDC provides critical support to every state to protect Americans from antibiotic resistance.



U.S. Department of Heath and Human Services Centers for Disease Control and Prevention

www.cdc.gov/ARinvestments