AR Solutions in Action

CDC's Investments to Combat Antibiotic Resistance Threats

FISCAL YEAR 2021

MISSOURI \$4,804,870

Funding for AR Activities
Fiscal Year 2021

CDC Prevention Epicenter

HIGHLIGHTS

FUNDING TO STATE HEALTH DEPARTMENTS



\$317,667

RAPID DETECTION & RESPONSE: State, territory, and local public health partners fight AR in healthcare, the community, and food.

Programs use the AR Lab Network to rapidly detect threats and then implement prevention, response, and antibiotic stewardship to stop the spread of resistant germs. Additional resources, appropriated to CDC to fight COVID-19, will also help in the fight against AR by improving infection prevention and control in healthcare facilities.



\$143,561

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

Missouri uses whole genome sequencing to track and monitor local outbreaks of *Listeria, Salmonella, Campylobacter*, and *Escherichia coli* and uploads sequence data into PulseNet for nationwide monitoring of outbreaks and trends. In Fiscal Year 2021, Missouri continued monitoring these isolates for resistance genes. When outbreaks are detected, local CDC-supported epidemiologists investigate the cases to stop spread.



\$16,000

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.

The Gonococcal Isolate Surveillance Project (GISP) informs national treatment guidelines and monitors how well antibiotics work on laboratory samples collected from sentinel sexually transmitted disease (STD) clinics, which often are the first to detect the threat. Select STD clinics also enhance surveillance by collecting additional gonococcal isolates from women and from extragenital sites.

COVID-19: coronavirus disease 2019

AR: antibiotic resistance HAI: healthcare-associated infections.

lage 1 of 2 This data represents CDC's largest funding categories for AR. It shows extramural funding that supports AR activities from multiple funding lines



AR Solutions In Action

CDC's Investments to Combat Antibiotic Resistance Threats

FISCAL YEAR 2021

MISSOURI AR Investments (cont.)

FUNDING TO UNIVERSITIES & HEALTHCARE PARTNERS



\$1,546,268

WASHINGTON UNIVERSITY: CDC Prevention Epicenter

The Prevention Epicenters Program is a collaborative network between public health and experts in relevant fields of HAI and AR that responds to research priorities to protect patients. The network conducts research to support the translation of innovative infection control and prevention strategies for preventing HAIs, AR and other adverse events in all healthcare settings.

This work is funded by resources appropriated to CDC to support its response to COVID-19. <u>Learn more: www.cdc.gov/hai/epicenters</u>



WASHINGTON UNIVERSITY, ST. LOUIS: Innovative Prevention & Tracking

Experts are working to find an effective, feasible and sustainable way to implement screening for carbapenem-resistant Enterbacterales (CRE) in hospitals in India, informing infection prevention efforts and helping healthcare facilities reduce death rates caused by CRE infections.



\$748,687

WASHINGTON UNIVERSITY, ST. LOUIS: Discovering & Implementing What Works

Experts are evaluating the connection between carbapenem-resistant Enterobacterales, extended-spectrum ß-lactamase-producing Enterobacterales, methicillin-resistant *Staphylococcus aureus*, and vancomycin-resistant Enterococcus samples taken from hospitalized patients and their household members, informing infection prevention strategies in the region to prevent spread.



WASHINGTON UNIVERSITY, ST. LOUIS: Global Expertise & Capacity Enhancements

CDC's global work to combat AR prevents the importation of AR threats into the United States. Experts are evaluating routine clinical culture data from ICU patients for carbapenem-resistant Enterobacteriaceae surveillance and to monitor and guide infection prevention practices in two hospitals in India.

\$1,391,000

COVID-19: coronavirus disease 2019

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