



MISSOURI

\$2,606,033

Funding for AR Activities
Fiscal Year 2019

FUNDING TO STATE HEALTH DEPARTMENTS



\$270,664

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, Missouri established the Missouri antibiotic Stewardship Educational Collaborative (MASEC), which provided 11 educational webinars and interactive case studies, reference materials, and an email hotline to 80 pharmacists and stewardship practitioners. MASEC surveyed 51 hospitals' stewardship programs, consulted on appropriate clinical treatments, and provided guidance on effective communication strategies with primary providers.



\$151,056

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 *E. coli* and uploads sequence data into PulseNet for nationwide monitoring of outbreaks and trends. In Fiscal Year 2020, Missouri will continue monitoring these isolates for resistance genes. When outbreaks are detected, local CDC-supported epidemiologists investigate the cases to stop spread.



\$14,932

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.

To help inform national treatment guidelines for gonorrhea, Missouri participates in the Gonococcal Isolate Surveillance Project (GISP), testing how well antibiotics work on laboratory samples from sentinel STD clinics, which are often the first to detect the threat.

FUNDING TO UNIVERSITIES & HEALTHCARE PARTNERS



\$500,000

WASHINGTON UNIVERSITY: CDC Prevention Epicenter

CDC collaborates with medical academic investigators to conduct innovative infection control and prevention research in healthcare settings. One of the projects in Missouri will determine whether intervention on the microbiome (germs in and on our bodies) can reduce drug-resistant urinary-tract infections. Another study is examining opportunities to improve antibiotic use in surgical patients to improve patient outcomes. [Learn more: www.cdc.gov/hai/epicenters](http://www.cdc.gov/hai/epicenters)

AR Solutions *In Action*

CDC's Investments to Combat Antibiotic Resistance Threats

FISCAL YEAR
2019

MISSOURI AR Investments (cont.)



\$500,668

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

Investigators will evaluate hospital-onset bacteremia in healthcare facilities in India as a feasible, useful, and acceptable metric for HAI surveillance in low- and middle-income countries.



\$536,153

WASHINGTON UNIVERSITY, ST. LOUIS: Microbiome Assessment & Intervention

Researchers at Washington University in St. Louis will be using a small laboratory system that resembles the human gut microbiome to look for markers of microbiome disruption from antibiotics. Using this information, they will develop and test a panel of markers that may be able to help clinicians understand their patients' risk for infection, and may support development of new therapies and microbiome disruption diagnostics.



\$632,560

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

The Leadership in Epidemiology, Antibiotic Stewardship, and Public Health (LEAP) Fellowship is a joint program of the Infectious Diseases Society of America (IDSA), Society for Healthcare Epidemiology of America (SHEA) and Pediatric Infectious Diseases Society (PIDS). It is designed to provide select Fellows at ID training programs across the nation an opportunity for immersive experiences in healthcare leadership, antibiotic stewardship and infection prevention, and the inner workings of public health departments.

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

www.cdc.gov/ARinvestments



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