AR Solutions in Action

CDC's Investments to Combat Antibiotic Resistance Threats

FISCAL YEAR 2018

MISSISSIPPI \$369,992

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, Mississippi expanded its ability to test for AR threats. The state public health laboratory tested 127 isolates for resistance that makes our most powerful antibiotics ineffective, and submitted 26 *Candida* and ESBL isolates to the Tennessee AR Lab Network regional laboratory for further testing.

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, Mississippi engaged in multiple HAI/AR prevention initiatives, including participation in the STRIVE Project (States Targeting Reduction in Infections via Engagement) with a 50% reduction in targeted infections, performing infection control assessments in 22 facilities, and providing antibiotic stewardship data to hospitals.



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

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



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.

To help inform national treatment guidelines for gonorrhea, Mississippi 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.



AR: antibiotic resistance HAI: healthcare-associated infection

