AR Solutions *In Action*

CDC's Investments to Combat Antibiotic Resistance Threats

FISCAL YEAR 2018

SOUTH CAROLINA

$1,596,934

Funding for AR Activities
Fiscal Year 2018

FUNDING TO STATE HEALTH DEPARTMENTS

$422,266

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

With 2017 funding, South Carolina effectively responded to five cases of *Staphyloccocus aureus* in a hospital unit that cares for newborns. Facility infection control practices were observed and recommendations were made and implemented. No further cases were identified.

$354,572

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, South Carolina improved prevention capacity by providing a training on HAI outbreak prevention to approximately 170 Infection Preventionists, resulting in 96% of participants intending to institute change in their facility.

$219,760

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

South Carolina 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, South Carolina 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

$600,336

UNIVERSITY OF SOUTH CAROLINA: Innovative Prevention & Tracking

This study will measure the variability of antibiotic-resistant bacteria in bioaerosols (tiny liquid droplets in the air that can contain bacteria and viruses) generated during waste water treatment and evaluate the risk of exposure, colonization (carrying and potentially spreading the germ), and infection to treatment plant workers. The study will compare antibiotic-resistant bacteria found in employees working in wastewater treatment plants to those found in workers from drinking water treatment plants where exposure to antibiotic-resistant bacteria is expected to be much lower.

AR: antibiotic resistance **HAI:** healthcare-associated infection

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