MARYLAND

$5,222,403

Funding for AR Activities
Fiscal Year 2016

FUNDING TO STATE HEALTH DEPARTMENTS

AR LABORATORY NETWORK (ARLN) REGIONAL LABS provide information to protect communities by rapidly identifying and describing new resistance genes and mechanisms. The ARLN establishes nationwide lab infrastructure by boosting state and local capacity and technology to detect, support response to, and contain AR threats—and create new innovations to detect AR. Maryland is one of seven ARLN regional labs supporting the larger network.

HAI/AR DETECT & RESPOND PROGRAMS quickly detect and then contain the spread of resistant infections, protecting patients from new resistance threats. CDC and states are working together to scale up programs and HAI prevention infrastructure to identify, contain, and prevent HAIs, including those infections caused by antibiotic-resistant bacteria. Programs will use data for local response. All states and five major cities/territories will receive support and lab capacity to track and stop the "nightmare bacteria," carbapenem-resistant Enterobacteriaceae (CRE).

HAI/AR PREVENTION PROGRAMS work with partners to prevent infection and contain spread of germs between patients and healthcare facilities, and increase antibiotic stewardship education, to protect patients. With state HAI/AR prevention programs, CDC will implement more empowered prevention networks—where public health and healthcare work together—to better prevent infections, contain spread, and improve antibiotic use. Of the factors contributing to antibiotic resistance, the most important one we can change is inappropriate antibiotic use. CDC works to improve antibiotic use by increasing education and awareness of the importance of antibiotic use among providers and the public.

This data represents CDC’s largest funding categories for AR. It shows domestic, extramural funding that supports AR activities from multiple funding lines.

www.cdc.gov/ARInvestments

Critical support empowering the nation to tackle antibiotic resistance, the global threat jeopardizing modern medicine.
FOOD SAFETY projects protect communities by rapidly identifying drug-resistant foodborne bacteria to stop and solve outbreaks and improve prevention.

To improve food safety, CDC works to rapidly identify and respond to drug-resistant foodborne bacteria and outbreaks by using whole genome sequencing and increasing lab testing of pathogens like *Salmonella* and *Campylobacter*. CDC promotes responsible antibiotic use in food-producing animals.

EMERGING INFECTIONS PROGRAM (EIP) sites improve public health by translating population-based surveillance and research activities into informed policy and public health practice.

CDC’s EIP network is a national resource for surveillance, prevention, and control of emerging infectious diseases—like antibiotic-resistant infections. Learn more: [www.cdc.gov/ncezid/dpei/eip](http://www.cdc.gov/ncezid/dpei/eip).

FUNDING TO UNIVERSITIES & HEALTHCARE PARTNERS

JOHNS HOPKINS UNIVERSITY: Discovering & Implementing What Works

Preventing neonatal healthcare-associated infections in low resource settings globally. CDC has also funded Johns Hopkins University innovation projects to prevent antibiotic resistance through the CDC Prevention Epicenters Program. Learn more: [www.cdc.gov/hai/epicenters](http://www.cdc.gov/hai/epicenters).

UNIVERSITY OF MARYLAND: Innovative Prevention & Tracking

To implement and assess a prevention bundle for *C. difficile* infection in acute care hospitals.

SYNTHETIC BIOLOGICS: Microbiome Assessment & Intervention

To explore how selective pressure in the form of intravenous-administered ceftriaxone excreted into the gastrointestinal (GI) tract may lead to the emergence of antibiotic resistance in the gut microbiome, and whether specific intervention from SYN-004 (ribaxamase), the Company’s clinical-stage beta-lactamase designed to protect the gut microbiome, may prevent the emergence of antibiotic-resistant organisms in the gut microbiome.

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