

MARYLAND

\$5,222,403

Funding for AR Activities
Fiscal Year 2016



One new, local CDC staff person

AR Lab for the Mid-Atlantic Region

One of 10 sites for the Emerging Infections Program

FUNDING TO STATE HEALTH DEPARTMENTS



\$1,779,488

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.



\$384,313

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).



\$588,774

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.

AR: antibiotic resistance

HAI: healthcare-associated infection





\$154,000

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.



\$1,027,834

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/nceid/dpei/eip.

FUNDING TO UNIVERSITIES & HEALTHCARE PARTNERS



\$311,502

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.



\$455,478

UNIVERSITY OF MARYLAND: Innovative Prevention & Tracking

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



\$521,014

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.