

MASSACHUSETTS

\$5,027,687



Funding for AR Activities
Fiscal Year 2017

HIGHLIGHTS

Candida auris, a resistant fungus that can cause deadly infections, was identified in Massachusetts. CDC provides Massachusetts with resources to identify and contain resistant infections, like *C. auris*. After *C. auris* emerged in the U.S. in 2016, the AR Lab Network regional labs also began providing specialized testing to states fighting this new threat.

FUNDING TO STATE HEALTH DEPARTMENTS



\$751,617

RAPID DETECTION & RESPONSE to emerging drug-resistant germs is critical to contain the spread of these infections.

With 2016 funding, Massachusetts, in partnership with its Quality Improvement Network, enrolled 62 long-term care facilities into the National Healthcare Safety Network for *Clostridium difficile* infection (CDI) reporting. The HAI/AR program can begin to provide data reports to facilitate targeted facility-level CDI prevention.



\$507,299

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 2016 funding, Massachusetts analyzed antibiotic use practices across healthcare facilities and collaborated with these facilities to implement CDC's Core Elements of Antibiotic Stewardship, which outlines strategies to measure and improve antibiotic prescribing and use.



\$337,436

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

Massachusetts implemented whole genome sequencing of *Listeria*, *Salmonella*, *Campylobacter* and *E. coli* isolates submitted to its lab and began uploading sequence data into PulseNet for nationwide monitoring of outbreaks and trends. In Fiscal Year 2018, Massachusetts will begin simultaneously monitoring these isolates for resistance genes. When outbreaks are detected, local CDC-supported epidemiologists investigate the cases to stop spread.



\$50,000

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.



FUNDING TO UNIVERSITIES & HEALTHCARE PARTNERS



\$500,000

HARVARD PILGRIM HEALTH CARE AND UNIVERSITY OF CALIFORNIA, IRVINE: CDC Prevention Epicenter

A unique research program in which CDC collaborates with medical academic investigators to conduct innovative infection control and prevention research in healthcare settings. For example, one of the projects will conduct a randomized trial to assess whether statistical software tools can identify HAI outbreaks sooner in order to reduce their size and duration. Learn more: www.cdc.gov/hai/epicenters.



\$999,518

GINER, INC.: Microbiome Assessment & Intervention

Investigators will develop a clinical diagnostic test to detect the presence and amount of drug-resistant germs, like “nightmare bacteria” CRE, in a patient’s lower intestine. Test results may help healthcare providers understand the patient’s microbiome and their risk of being infected by a drug-resistant germ or spreading it to others. This type of rapid clinical test may help guide providers in their choice of antibiotics and infection control to better protect patients and—in the future—may direct the use of advanced probiotics and fecal transplants.



\$1,881,817

MASSACHUSETTS GENERAL HOSPITAL & HARVARD UNIVERSITY: Innovative Prevention & Tracking

This study will characterize how often healthy travelers become colonized with highly drug-resistant germs when traveling abroad. The study will also investigate risk factors for acquiring these drug-resistant germs while traveling and identify how long people carry these germs. Work will occur through Global TravEpiNet (GTEN), a CDC-supported national network of travel clinics across the U.S. To learn more: <https://wwwnc.cdc.gov/travel/page/gten>