## AR Solutions In Action

CDC's Investments to Combat Antimicrobial Resistance Threats

**CDC Prevention Epicenter** 

One of 10 sites for the Emerging Infections Program

**FISCAL YEAR** 

#### FUNDING TO HEALTH DEPARTMENTS



and food. CDC-funded HAI/AR Programs form a network of health departments that detect, prevent, respond to, and contain HAI/AR threats and promote appropriate use of antibiotics and antifungals. CDC's AR Lab Network provides nationwide

Rapid Detection & Response: State, territory, and local public health partners fight AR in health care, the community,

GEORGIA

\$16,696,026

Funding for AR Activities

Fiscal Year 2023

\$870,815

HAI/AR threats and promote appropriate use of antibiotics and antifungals. CDC's AR Lab Network provides nationwi lab capacity to rapidly detect AR and inform local prevention and response activities to stop the spread of antimicrobial-resistant germs and protect people.



**Food Safety** projects protect communities by rapidly identifying antimicrobial-resistant foodborne bacteria to stop and solve outbreaks and improve prevention.

Georgia uses whole genome sequencing to track local outbreaks of *Listeria, Salmonella, Campylobacter, Shigella,* and *Escherichia coli*, identifies AR genes, and shares surveillance data with PulseNet. When outbreaks are detected, local CDC-supported epidemiologists respond to stop their spread. Georgia conducts active, population-based surveillance

\$1,080,052

for foodborne diseases through CDC's Emerging Infections Program.



The Emerging Infections Program (EIP) HAI component helps answer critical questions about emerging HAI threats, advanced infection tracking methods, and AR in the United States.

\$3,031,666

The Georgia EIP performs population-based surveillance for candidemia, *Clostridioides difficile*, invasive *Staphylococcus aureus*, and resistant gram-negative bacteria. They also conduct HAI and antimicrobial use prevalence surveys and participate in a surveillance pilot for *Escherichia coli* infections to help support vaccine evaluation. Learn more: www.cdc.gov/hai/eip

 The AR Investment Map includes data from CDC's largest funding categories for AR. It represents extramural funding that supports AR activities from multiple funding lines in CDC's annual appropriations. Some work received full or partial funding from one-time supplemental appropriations. See the fiscal year 2023 AR Investment Map Supplemental Funding Fact Sheet for more information.

AR: antimicrobial resistance COVID-19: coronavirus disease 2019 HAI: healthcare-associated infection IPC: infection prevention and control NHSN: National Healthcare Safety Network STD: sexually transmitted disease STI: sexually transmitted infection

CDC provides critical support in the U.S. and abroad to protect people from antimicrobial resistance.

ARinvestments.cdc.gov



U.S. Department of Health and Human Services Centers for Disease Control and Prevention

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**GEORGIA** - AR Investments (cont.)

# \$50,000

research activities that inform policy and public health practice. EIP Active Bacterial Core surveillance (ABCs) is an active laboratory- and population-based surveillance system for invasive bacterial pathogens of public health importance. ABCs provides an infrastructure for further public health research, which may include special studies to identify disease risk factors, evaluate vaccine efficacy, and monitor the effectiveness of prevention policies. Learn more: www.cdc.gov/abcs

Emerging Infections Program (EIP) sites improve public health by conducting population-based surveillance and

\$50,000

### **FUNDING TO UNIVERSITIES & HEALTHCARE PARTNERS**



\$1,599,246

#### Emory University: CDC Prevention Epicenter

The Prevention Epicenters Program is a collaborative network of public health and experts in relevant fields of HAI and AR that responds to research priorities to protect patients. The network conducts research to support the translation of innovative IPC strategies for preventing HAIs, the spread of AR, and other adverse events in all healthcare settings. Learn more: <a href="https://www.cdc.gov/hai/epicenters">www.cdc.gov/hai/epicenters</a>

#### ABT Associates, Inc.: Discovering & Implementing What Works



\$7,453,385

Investigators are establishing a nursing home network with pre-positioned study staff and readily available lab capacity to perform data collection without impacting clinical care to rapidly characterize infectious diseases, particularly emerging pathogens and SARS-CoV-2 variants of concern, to inform IPC in nursing homes. Funding will support network sites in Georgia, Maryland, Michigan, Ohio, Oregon, Pennsylvania, Rhode Island, and Wisconsin. Learn more: www.cdc.gov/hai/research/safehealthcare.html



Learn more: www.cdc.gov/hai/research/hire-modeling-fellowship.html



A CDC cooperative agreement, Building Mathematical Modeling Workforce Capacity to Support Infectious Disease and Healthcare Research, supports pre-doctoral fellows' research to develop and apply computational tools and mathematical methods for modeling the spread of pathogens in health care. Fellows use existing or simulated datasets and real-time information to conduct analyses and build models relevant to combating HAIs and AR.

\$170,484



\$32,803

#### Emory University: Innovative Prevention & Tracking

An Emory University expert provides global infectious disease expertise, specifically on AR and advanced molecular detection strategies for AR and HAIs.



\$182,126

#### Emory University: Innovative Prevention & Tracking

Three Emory University experts work with CDC investigators to provide cardiology and echocardiography expertise and skills to help NHSN's transition to automated methods, including natural language processing-aided case finding.

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#### GEORGIA - AR Investments (cont.)

FISCAL YEAR



\$108,226

#### Emory University: Innovative Prevention & Tracking

Two Emory University experts work with CDC investigators to provide clinical kidney disease expertise that is critical to the development of new quality metrics, outcome measurement, and surveillance definition and protocol development to keep dialysis patients safe.



#### Emory University: Innovative Prevention & Tracking

An Emory University expert works with CDC investigators to provide technical assistance to NHSN on neonatal patient outcomes, improve quality measurement of HAIs and other health complications in this patient population, and identify opportunities to enhance IPC and antibiotic stewardship in the care of newborn infants.



#### Emory University: Innovative Prevention & Tracking

\$91,863

An Emory University expert works with CDC investigators to provide technical assistance to NHSN on surveillance of surgical site infections (SSIs), many of which are due to antimicrobial-resistant pathogens. The expert also supports collaborative efforts with surgical professional organizations to harmonize and strengthen SSI tracking for clinical and public health purposes.



\$183,111

#### Emory University: Innovative Prevention & Tracking

An Emory University expert works with CDC investigators to provide technical assistance to NHSN on the development of new measures of HAIs and AR, with the goal of enabling electronic health record systems and laboratory information systems to serve as source systems for the new measures, with the benefits of providing new insights into HAI and AR problems while streamlining reporting to NHSN.



\$73,244

#### Emory University: Innovative Prevention & Tracking

An Emory University expert works with CDC investigators to provide technical assistance to NHSN on the use of health information technology, including electronic health record systems, and medical informatics strategies for streamlining reporting to NHSN and using the healthcare data delivered to NHSN for clinical quality measurements that are meaningful and actionable.

$\smile$

\$148,540

### Organization for Safety, Asepsis, and Prevention (Dental Infection Prevention and Safety Association): Innovative Prevention & Tracking

Experts support updating communication and web materials related to improving antibiotic use for dentists and dental health professionals. They also help with dissemination and education about appropriate antibiotic use to dental health professionals.



#### Emory University: Discovering & Implementing What Works

CDC's Project Firstline is a collaborative of diverse partners that provides engaging, innovative, and effective IPC training for U.S. healthcare workers and the public health workforce. It offers resources in a variety of formats to meet the diverse learning needs and preferences of the healthcare workforce. Partners host events, create tools, and publish resources that help healthcare workers better understand and correctly implement IPC. Learn more: www.cdc.gov/infectioncontrol/projectfirstline

\$808,870

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# FISCAL YEAR **2023**

GEORGIA - AR Investments (cont.)



#### Council of State and Territorial Epidemiologists: Innovative Prevention & Tracking

Experts support health department HAI/AR Programs and other partners in addressing HAI/AR challenges. This includes support for the Council of State and Territorial Epidemiologists HAI/AR Subcommittee, Applied Epidemiology Fellowships, the Council for Outbreak Response: HAIs and Antimicrobial-Resistant Pathogens, and the Antimicrobial Resistance Surveillance Task Force.

### Training Programs In Epidemiology and Public Health Interventions Network: Global Expertise & Capacity Enhancements

\$150,000

CDC's global work to combat AR helps prevent the importation of AR threats into the United States. Experts work with the University of São Paulo in Brazil to enhance hospital IPC through assessments of IPC capacity, continuous quality improvement (CQI), and a community of practice (CoP). A Cesarean section (CS) surgical site infection (SSI) project strengthens IPC through post-discharge surveillance and data validation, as well as CQI and a CoP.

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