# AR Solutions In Action

CDC's Investments to Combat Antimicrobial Resistance Threats

MINNESOTA

Three local CDC-supported fellows

FISCAL YEAR

2023

**Regional Lab for the AR Lab Network** (Central)

One of 10 sites for the Emerging **Infections Program** 

### FUNDING TO HEALTH DEPARTMENTS



**AR Laboratory Network Regional Lab:** Regional labs boost state and local testing capacity and technology to detect, support response to, and prevent AR threats across the nation—and inform innovations to detect AR. Minnesota helps rapidly identify and respond to urgent AR threats by participating in core testing activities. Minnesota supports increased colonization screening needs for *Candida auris* and carbapenemase-producing organisms by providing surge capacity to multiple states within and outside the Central Region. Minnesota also serves as an AR Lab

\$7,132,847

Fiscal Year 2023

Funding for AR Activities

#### \$2,250,497

Network Streptococcus pneumoniae reference laboratory.



\$853,440

Rapid Detection & Response: State, territory, and local public health partners fight AR in health care, the community, 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 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. Minnesota uses whole genome sequencing to track outbreaks and identify AR genes and shares surveillance data with

PulseNet. Local CDC-supported epidemiologists respond to outbreaks to stop their spread. The Food Safety Center of Excellence supports other health departments to track and investigate foodborne diseases. Minnesota conducts

\$1,366,401



active, population-based surveillance for foodborne diseases through CDC's Emerging Infections Program. Fungal Disease projects improve our ability to track resistance to antifungals and stop it from spreading. Minnesota conducts surveillance to identify fungal diseases, monitor for new and emerging AR, and implement

\$120,150

strategies to prevent the spread of AR in high-risk areas. Minnesota conducts population-based surveillance for Candida bloodstream infections through CDC's Emerging Infections Program.

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 Page 1 of 2 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.



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

ARinvestments.cdc.gov

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MINNESOTA - AR Investments (cont.)



\$24,000

partners to test for and quickly respond to resistant gonorrhea to stop its spread in high-risk communities. Only one recommended treatment option remains for gonorrhea and resistance to other antibiotics continues to grow. The Gonococcal Isolate Surveillance Project (GISP) informs national treatment guidelines for gonorrhea by monitoring how well antibiotics work on laboratory samples collected from sentinel STD clinics, which often are the first to detect the threat. Select STD clinics also enhance surveillance by collecting additional gonococcal isolates from women and from extragenital sites. This work is jointly supported by CDC STI and AR funds.

Drug-resistant Gonorrhea Detect & Respond Program works with state and local epidemiology and laboratory

## **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.



The Minnesota EIP performs population-based surveillance for candidemia, *Clostridioides difficile*, invasive *Staphylococcus aureus*, nontuberculous mycobacteria, 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.

\$2,464,609

Learn more: www.cdc.gov/hai/eip



**Emerging Infections Program (EIP)** sites improve public health by conducting population-based surveillance and research activities that inform policy and public health practice.

\$50,000 re

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: <u>www.cdc.gov/abcs</u>

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



#### Mayo Clinic Center for Tuberculosis: Innovative Prevention & Tracking

CDC's Tuberculosis (TB) Centers of Excellence for Training, Education, and Medical Consultation (COEs) increase knowledge, skills, and abilities for TB prevention and control through communication, education, and training activities. The COEs also improve sustainable evidence-based TB clinical practices and patient care through the provision of expert medical consultation.

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