

AR Solutions *In Action*

CDC's Investments to Combat Antibiotic Resistance Threats

FISCAL YEAR
2020

TENNESSEE

\$8,416,783

Funding for AR Activities
Fiscal Year 2020

1 local CDC fellow

Regional Lab for the AR Lab
Network (Southeast)

One of 10 sites for the Emerging
Infections Program

HIGHLIGHTS

FUNDING TO STATE HEALTH DEPARTMENTS



\$2,656,270

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 new innovations to detect AR.

In 2020, Tennessee provided testing surge capacity for AR outbreaks from other AR Lab Network regional labs overwhelmed by SARS-CoV-2 testing or other issues brought on by the pandemic, such as supply and personnel shortages in the labs. Some states have seen increased transmission of AR pathogens in COVID-19 wards, requiring screening support to identify transmission and inform public health response. By performing AR testing for states outside of their region, Tennessee ensured outbreaks were identified and responded to swiftly, maintaining national AR testing capacity. These collaborations further display the flexibility of the AR Lab Network and how CDC's investments can be adapted during a crisis.



\$3,782,193

RAPID DETECTION & RESPONSE: State, territory, and local public health partners fight AR in healthcare, the community, and food.

Programs use the AR Lab Network to rapidly detect threats and then implement prevention, response, and antibiotic stewardship to stop the spread of resistant germs. Additional resources, appropriated to CDC to fight COVID-19 will also help in the fight against AR by improving infection prevention and control in healthcare facilities.



\$38,255

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

Tennessee uses whole genome sequencing to track and monitor local outbreaks of *Listeria*, *Salmonella*, *Campylobacter*, and *E. coli* and uploads sequence data into PulseNet for nationwide monitoring of outbreaks and trends. In Fiscal Year 2020, Tennessee will continue monitoring these isolates for resistance genes. When outbreaks are detected, local CDC-supported epidemiologists investigate the cases to stop spread. CDC also funds Tennessee's Food Safety Center for Excellence, which provides assistance and training to other health departments to build capacity to track and investigate foodborne disease.

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

ARinvestments.cdc.gov



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

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TENNESSEE AR Investments (cont.)



\$141,017

FUNGAL DISEASE projects improve our ability to track antifungal resistance and stop it from spreading.

With funding for fungal disease surveillance, Tennessee increased their ability to identify fungal diseases, monitor for new and emerging resistance, and implement strategies to prevent its spread in high-risk areas. Improving detection for fungal diseases, like *Candida auris*, means patients receive appropriate treatment and while reducing unnecessary antibiotic use.



\$1,799,048

EMERGING INFECTIONS PROGRAM (EIP) sites improve public health by translating population-based surveillance and research activities into informed policy and public health practice. This work is also funded in part by resources appropriated to CDC to support its response to COVID-19.

The Tennessee EIP performs population-based surveillance for candidemia, *C. difficile*, invasive *S. aureus*, and resistant Gram-negative bacteria; conducts HAI and antibiotic use prevalence surveys; develops and standardizes surveillance and outbreak response for foodborne infections; collaborates with the CDC Prevention Epicenters; and supports special projects. [Learn more: www.cdc.gov/hai/eip](http://www.cdc.gov/hai/eip).

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