

TENNESSEE

\$7,005,188

Funding for AR Activities
Fiscal Year 2021

One local CDC AR expert

Regional Lab for the AR Lab
Network (Southeast)

One of 10 sites for the Emerging
Infections Program

HIGHLIGHTS

FUNDING TO STATE HEALTH DEPARTMENTS



\$2,788,122

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 2021, 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.



\$1,071,966

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.



\$397,028

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 *Escherichia coli* and uploads sequence data into PulseNet for nationwide monitoring of outbreaks and trends. In Fiscal Year 2021, Tennessee continued 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.

TENNESSEE AR Investments (cont.)



\$106,862

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.



\$1,678,210

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 coronavirus disease 2019 (COVID-19).

The Tennessee EIP performs population-based surveillance for candidemia, *Clostridium difficile*, invasive *Staphylococcus 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)

FUNDING TO UNIVERSITIES & HEALTHCARE PARTNERS



\$963,000

VANDERBILT UNIVERSITY: Global Expertise & Capacity Enhancements

CDC's global work to combat AR prevents the importation of AR threats into the United States. Experts are developing a multinational project to improve genomic surveillance of resistance, identify risk factors for resistant Gram-negative bacilli bloodstream infections, enhance training in infection prevention and control and antibiotic stewardship, and strengthen laboratory capacity for AR detection in Greece.