

TENNESSEE

\$7,200,894

Funding for AR Activities
Fiscal Year 2018



2 local CDC fellows

Regional Lab for the AR Lab Network (Southeast)

One of 10 sites for the Emerging Infections Program

FUNDING TO STATE HEALTH DEPARTMENTS



\$3,176,913

AR LABORATORY NETWORK 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.

Tennessee is home to one of the AR Lab Network Regional Labs and was among the first to provide *Candida auris* (*C. auris*) colonization screening, a type of test that helps determine if a patient is carrying the deadly fungal threat. With *C. auris* on the rise in the U.S., the Tennessee lab has provided *C. auris* screening surge capacity for other labs. About 12% of the screenings were positive since February 2018, and these data were used to launch containment responses. The lab also tested nearly 3,000 swabs for novel resistance mechanisms for carbapenemase-producing organisms, and identified 30 isolates carrying genes that are new or uncommon in the area.



\$469,706

RAPID DETECTION AND RESPONSE to novel or high-concern drug-resistant germs is critical to contain the spread of these infections.

With 2017 funding, Tennessee contained a novel CP-CRE within 48 hours by conducting an immediate risk assessment, working with the facility to place the patient on isolation precautions and immediately conducting additional testing to identify any further spread. All further specimens were negative and no transmission had occurred.



\$993,769

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 2017 funding, Tennessee instituted a system to improve access to hospital data and hospital expertise on antibiotic use, allowing the state to better use data for action, at both the facility- and state-level, and increasing capacity for prevention.



\$948,406

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 2019, Tennessee will begin simultaneously monitoring these isolates for resistance genes. When outbreaks are detected, local CDC-supported epidemiologists investigate the cases to stop spread.



\$125,000

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 while reducing unnecessary antibiotic use.



\$1,487,100

EMERGING INFECTIONS PROGRAM (EIP) sites improve public health by translating population-based surveillance and research activities into informed policy and public health practice.

CDC's EIP network is a national resource for surveillance, prevention, and control of emerging infectious diseases—like antibiotic-resistant bacteria and fungi. Learn more: www.cdc.gov/nceid/dpei/eip.