



MICHIGAN

\$3,177,788

Funding for AR Activities
Fiscal Year 2021

AR Lab Network's National
Tuberculosis Molecular
Surveillance Center

HIGHLIGHTS

FUNDING TO STATE HEALTH DEPARTMENTS



\$1,944,405

AR LABORATORY NETWORK REGIONAL LAB: The National Tuberculosis Molecular Surveillance Center uses universal whole genome sequencing (WGS) of *Mycobacterium tuberculosis* isolates from all culture-confirmed cases in the United States to support outbreak investigations and provide surveillance of drug resistance.

During the COVID-19 pandemic, Michigan used its AR Lab Network sequencing capacity to study SARS-CoV-2, sequencing more than 2,100 genomes Jan-Sept. 2020 to support contact tracing and help stop the spread of the virus. These collaborations further display the flexibility of the AR Lab Network and how CDC's investments can be adapted during a crisis.



\$939,055

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.



\$254,448

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

Michigan 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, Michigan continued monitoring these isolates for resistance genes. When outbreaks are detected, local CDC-supported epidemiologists investigate the cases to stop spread.

MICHIGAN AR Investments (cont.)



\$22,335

GONORRHEA RAPID DETECTION & RESPONSE works with state and local epidemiology and laboratory partners to test for and quickly respond to resistant gonorrhea to stop its spread in high-risk communities. Only one treatment option remains for gonorrhea and resistance continues to grow.

The Gonococcal Isolate Surveillance Project (GISP) informs national treatment guidelines and Gonococcal Isolate Surveillance Project (GISP) monitors how well antibiotics work on laboratory samples collected from sentinel sexually transmitted disease (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.

FUNDING TO UNIVERSITIES & HEALTHCARE PARTNERS



\$17,545

UNIVERSITY OF MICHIGAN: Discovering & Implementing What Works

A University of Michigan expert is working with CDC investigators to provide informatics and information technology expertise to identifying, developing, and supporting automated data collection and reporting in CDC's National Healthcare Safety Network.