

AR Solutions *In Action*

CDC's Investments to Combat Antibiotic Resistance Threats

FISCAL YEAR
2020

PHILADELPHIA, PA

\$1,920,293

Funding for AR Activities
Fiscal Year 2020

1 local CDC AR expert &
1 local CDC fellow

HIGHLIGHTS

CDC Prevention Epicenter

FUNDING TO STATE HEALTH DEPARTMENTS



\$451,326

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.



\$6,180

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

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



\$4,923

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

With funding for fungal disease surveillance, Philadelphia 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.



\$185,588

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 STD Surveillance Network (SSuN) monitors adherence to national gonorrhea treatment guidelines for patients diagnosed and reported with gonorrhea from all provider settings across funded jurisdictions. The Gonococcal Isolate Surveillance Project (GISP) informs national treatment guidelines and monitors 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.

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

[ARinvestments.cdc.gov](https://www.cdc.gov/ARinvestments)



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

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AR Investments (cont.)

FUNDING TO UNIVERSITIES & HEALTHCARE PARTNERS



UNIVERSITY OF PENNSYLVANIA: CDC Prevention Epicenter

\$600,000

The Prevention Epicenters Program is a collaborative network between public health and experts in relevant fields of HAI and AR that responds to research priorities to protect patients. The network conducts research to support the translation of innovative infection control and prevention strategies for preventing HAIs, AR and other adverse events in all healthcare settings. This work is funded by resources appropriated to CDC to support its response to COVID-19.

[Learn more: www.cdc.gov/hai/epicenters](http://www.cdc.gov/hai/epicenters)



UNIVERSITY OF PENNSYLVANIA: Microbiome Assessment & Intervention

\$672,276

Researchers will study people with ESBL infections in the community to determine how often the germ spreads within household settings and possible reasons for its spread. Researchers will evaluate their entire household over a two-month period, collecting stool samples from household members and pets. Other data collected will include demographic and comorbidity information; swabs of common touch sites; use of antibiotics and travel; hygiene habits; external exposures (e.g., gym, daycare); and household layout.

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