## AR Solutions in Action

CDC's Investments to Combat Antibiotic Resistance Threats

**FISCAL YEAR** 2019

### PENNSYLVANIA

\$2,576,581

**Funding for AR Activities** Fiscal Year 2019



### FUNDING TO STATE HEALTH DEPARTMENTS



Philadelphia)

RAPID DETECTION & RESPONSE: State, territory, and local public health partners fight antibiotic resistance in healthcare, the community, and food. Programs use the AR Lab Network to rapidly detect threats and implement prevention, response, and antibiotic stewardship to stop the spread of resistant germs.

With 2018 funding, the Pennsylvania Department of Health identified a case of carbapenemase-producing carbapenem-resistant Enterobacteriaceae in an acute care rehabilitation facility. The state implemented the CDC containment strategy and the AR Laboratory Network Mid-Atlantic Regional Lab identified five additional cases. Pennsylvania conducted infection control assessments and colonization screening over three months until there was no further spread.



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

Pennsylvania uses whole genome sequencing to track and monitor local outbreaks of Listeria, Salmonella, \$142,856 Campylobacter, and E. coli and uploads sequence data into PulseNet for nationwide monitoring of outbreaks



and trends. In Fiscal Year 2020, Pennsylvania will continue monitoring these isolates for resistance genes. When outbreaks are detected, local CDC-supported epidemiologists investigate the cases to stop spread.



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

With funding for fungal disease surveillance, Pennsylvania 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.



(Includes funding to

Philadelphia)

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.

Philadelphia participates in a sentinel surveillance project, the STD Surveillance Network, monitoring adherence to gonorrhea treatment guidelines. Philadelphia also participates in the Gonococcal Isolate Surveillance Project (GISP), testing how well antibiotics work on laboratory samples from sentinel STD clinics, which are often the first to detect the threat. Select STD clinics in Philadelphia also collect additional samples from women and extragenital sites, to enhance surveillance for antibiotic resistant gonorrhea.

AR: antibiotic resistance HAI: healthcare-associated infection

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



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**2019** 

**PENNSYLVANIA AR Investments (cont.)** 

#### **FUNDING TO UNIVERSITIES & HEALTHCARE PARTNERS**



#### **UNIVERSITY OF PENNSYLVANIA: CDC Prevention Epicenter**

CDC collaborates with medical academic investigators to conduct innovative infection control and prevention research in healthcare settings. One of the projects in Pennsylvania will compare different methods of monitoring room cleaning in intensive care units to prevent HAIs. These investigators will also convene national experts to identify gaps and collaborate on pediatric AR research. Learn more: www.cdc.gov/hai/epicenters

Page 2 of 2 This data represents CDC's largest funding categories for AR. It shows extramural funding that supports AR activities from multiple funding lines

AR: antibiotic resistance HAI: healthcare-associated infection

