AR Solutions *In Action*

CDC's Investments to Combat Antibiotic Resistance Threats Nationwide

FISCAL YEAR 2017

PENNSYLVANIA

$3,530,799

Funding for AR Activities
Fiscal Year 2017

FUNDING TO STATE HEALTH DEPARTMENTS

$897,445
(Includes funding to Philadelphia)

RAPID DETECTION & RESPONSE to emerging drug-resistant germs is critical to contain the spread of these infections.
With 2016 funding, Pennsylvania successfully contained the first U.S. *mcr*-1 case, a gene that can make bacteria resistant to the strongest antibiotics. With CDC, the HAI/AR program rapidly responded with contact tracing and screened 105 people within exposed households and healthcare facilities. No additional cases were detected.

$820,957

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 2016 funding, Pennsylvania engaged 110 pharmacy students and 86 community pharmacy partners to educate 830 pharmacists and consumers on improving antibiotic use and supporting primary prevention efforts across the community to prevent antibiotic resistance.

$219,367
(Includes funding to Philadelphia)

FOOD SAFETY projects protect communities by rapidly identifying drug-resistant foodborne bacteria to stop and solve outbreaks and improve prevention.
In Fiscal Year 2018, Pennsylvania will ramp up testing to include whole genome sequencing of all *Listeria*, *Salmonella*, *Campylobacter* and *E. coli* isolates and simultaneously monitor these isolates for resistance genes. States upload the sequence data into PulseNet for nationwide monitoring of outbreaks and trends. When outbreaks are detected, local CDC-supported epidemiologists investigate the cases to stop spread.

$50,000
(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.

FUNDING TO UNIVERSITIES & HEALTHCARE PARTNERS

$499,569

UNIVERSITY OF PENNSYLVANIA: CDC Prevention Epicenter
A unique research program in which CDC collaborates with medical academic investigators to conduct innovative infection control and prevention research in healthcare settings. For example, one of the University of Pennsylvania projects will compare three methods of monitoring environmental room cleaning to evaluate effective cleaning for intensive care units. Learn more: www.cdc.gov/hai/epicenters.

 This data represents CDC's largest fundng categories for AR. It shows domestic, extramural funding that supports AR activities from multiple funding lines. **AR:** antibiotic resistance **HAI:** healthcare-associated infection

CDC provides critical support to every state to protect Americans from antibiotic resistance.

www.cdc.gov/ARinvestments

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

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FISCAL YEAR **2017**

PENNSYLVANIA AR Investments (continued)

$721,198

TRUSTEES OF THE UNIVERSITY OF PENNSYLVANIA: Discovering & Implementing What Works

Improving antibiotic use can help slow resistance. Investigators will identify indicators of appropriate antibiotic prescribing available in electronic health records. These indicators can be used to create automated reports to guide improving antibiotic use for commonly encountered infections in the inpatient and outpatient setting.

$322,263

CHILDREN'S HOSPITAL OF PHILADELPHIA: Microbiome Assessment & Intervention

Researchers will examine if antibiotics given to mothers immediately before birth, or to newborns right after birth, can increase the weight gain of children in the first 5 years of life.

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U.S. Department of Heath and Human Services
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