AR Solutions in Action

CDC's Investments to Combat Antibiotic Resistance Threats

FISCAL YEAR

WISCONSIN \$3,208,397

Funding for AR Activities Fiscal Year 2018



1 local CDC fellow

Regional Lab for the AR Lab Network (Midwest)

HIGHLIGHTS

FUNDING TO STATE HEALTH DEPARTMENTS



\$1,185,022

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.

Wisconsin is home to one of the AR Lab Network regional labs, which can perform specialty testing for their region when emerging resistance threats occur. From Jan.-Sept. 2018, Wisconsin performed 1,860 CRE colonization screenings, a type of test that helps determine if a patient is carrying and potentially spreading the "nightmare bacteria." The lab identified nearly 300 CRE isolates with resistance genes that are new or uncommon in the area. The lab also worked with states in the region to conduct point prevalence surveys and admission screenings to help identify and contain the spread of resistance in healthcare facilities.



\$652,719

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

With 2017 funding, Wisconsin partnered with the Chicago and Illinois departments of health to successfully respond to cases of resistant *Pseudomonas aeruginosa* in a skilled nursing facility by implementing infection control measures and increasing laboratory capacity to identify new cases.



\$495,616

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, Wisconsin expanded a comprehensive surveillance program for "nightmare bacteria" CRE, improving prevention through better estimates of burden, targeted prevention based on geographic spread, and evaluation of inter-facility transfer including nursing homes and hospitals.



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

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



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.

During July 2017–June 2018, the Wisconsin Strengthening the United States Response to Resistant Gonorrhea (SURRG) project increased testing to about 10% of the more than 4,700 gonorrhea cases reported in Milwaukee County. Wisconsin identified 19 samples that did not respond optimally to recommended antibiotics, and grantees adhered to follow-up protocols to ensure the patients and their sex partners received the right treatment and to help stop spread of the germ.

Page 1 of 1 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





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