

ILLINOIS

\$5,478,248

Funding for AR Activities
Fiscal Year 2018



1 local CDC AR expert



FUNDING TO STATE HEALTH DEPARTMENTS



\$774,952

(Includes funding to Chicago)

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

With 2017 funding, Illinois continued surveillance of “nightmare bacteria” CRE and CRPA through a statewide registry, allowing them to detect and support the investigation of 54 cases of non-KPC CRE or VIM CRPA (enzymes that can make powerful antibiotics ineffective) across the state.



\$1,391,822

(Includes funding to Chicago)

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, Illinois held the Illinois Summit on Antimicrobial Stewardship. Subsequent analysis found that hospitals that attended at least one summit were 37% more likely to report implementing all core elements than those that did not attend.



\$99,162

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

In Fiscal Year 2019, Illinois 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.



\$100,000

(Includes funding to Chicago)

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

With funding for fungal disease surveillance, Chicago 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.



\$13,000

(Includes funding to Chicago)

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.

To help inform national treatment guidelines for gonorrhea, Chicago participates in the Gonococcal Isolate Surveillance Project (GISP), testing how well antibiotics work on laboratory samples from sentinel STD clinics, which often are the first to detect the threat.

FUNDING TO UNIVERSITIES & HEALTHCARE PARTNERS



\$661,534

CHICAGO PREVENTION & INTERVENTION EPICENTER AT RUSH UNIVERSITY MEDICAL CENTER AND COOK COUNTY HEALTH & HOSPITALS SYSTEM: 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 Illinois will study what factors could put a patient at risk for a drug-resistant infection. Another study is assessing regional transmission of an antibiotic-resistant germ and identifying intervention strategies. Learn more: www.cdc.gov/hai/epicenters



\$941,762

UNIVERSITY OF ILLINOIS, CHICAGO: CDC Prevention Epicenter

CDC collaborates with medical academic investigators to conduct innovative research to protect patients from antibiotic-resistant germs in healthcare settings. Topics include improving testing for *C. difficile* (which can cause deadly diarrhea), evaluating methods for tracking healthcare-associated infections, assessing potential routes for pathogen transmission in long-term care facilities, and evaluating a device to prevent post-surgery infections. Learn more: www.cdc.gov/hai/epicenters



\$283,965

NORTHWESTERN UNIVERSITY: Discovering & Implementing What Works

Using samples collected from a hospital, researchers will develop methods that will help others study the microbiome of the healthcare environment. This project will help healthcare providers ensure that facilities are safe.



\$227,820

UNIVERSITY OF CHICAGO: Innovative Prevention & Tracking

This project will expand an approach that can analyze genetic data directly from stool samples to identify known antibiotic-resistant genes, a faster way than other testing methods. An efficient testing panel like this could improve outbreak detection and patient outcomes.



\$518,542

RUSH UNIVERSITY MEDICAL CENTER: Innovative Prevention & Tracking

Researchers will use whole genome sequencing (WGS) to examine historical methicillin-resistant *Staphylococcus aureus* (MRSA) clinical isolates from the Cook County Health and Hospitals System in Chicago, IL. The objective of this study is to use WGS along with epidemiologic data to better understand the spread of MRSA between healthcare and community settings, with an ultimate goal to identify potential interventions that can prevent infections.



\$387,250

RUSH UNIVERSITY: Discovering & Implementing What Works

Candida auris (*C. auris*) is an emerging, drug-resistant fungus that causes outbreaks of serious infections in healthcare settings. Patients who are colonized (carrying and potentially spreading the germ) but not infected can transmit *C. auris* to others and are at risk of infection themselves. This study will help us better understand factors that are associated with *C. auris* colonization in high-risk patients and the effectiveness of chlorhexidine bathing as a possible decolonization method.



\$78,439

NORTHWESTERN UNIVERSITY: Innovative Prevention & Tracking

Researchers are working with CDC to develop innovative solutions for data collection and the study of healthcare-associated infections and other patient-safety issues in long-term care facilities.