AR Solutions

In Action

CDC’s Investments to Combat Antibiotic Resistance Threats

AR & COVID-19 Funding Help
Stop Spread of Emerging Threats

Fiscal Year 2020
Sampling of Shared Activities

Many of the nation’s efforts to prevent the spread of SARS-CoV-2 will also help in the fight against antibiotic resistance, including investments in infection control and prevention, training, surveillance, and public health personnel. The following represent many of those shared public health activities that CDC led in Fiscal Year 2020 using appropriations for AR or COVID-19.

**Building healthcare worker infection control capacity: Project Firstline**
Project Firstline is a collaborative of healthcare and public health partners that provides engaging and innovative infection control training. Funded by COVID-19 supplemental appropriations, CDC works with health departments, academic institutions, and non-governmental healthcare and public health partners to provide the U.S. healthcare and public health workforces a foundational understanding of infection control to protect the nation from infectious disease threats, including COVID-19 and AR. Learn more: [www.cdc.gov/ProjectFirstline](http://www.cdc.gov/ProjectFirstline).

**Strengthening COVID-19 surveillance in healthcare personnel: Emerging Infections Program (EIP)**
With COVID-19 supplemental appropriations, EIP has expanded existing HAI/AR surveillance projects to include COVID-19 surveillance among healthcare personnel. Learn more: [www.cdc.gov/hai/eip](http://www.cdc.gov/hai/eip).

**Infectious disease modeling to support prevention and response: MInD-Healthcare**
AR funding supports the Modeling Infectious Diseases in Healthcare (MInD-Healthcare) Network, which uses mathematical modeling to guide prevention needs for AR pathogens. This network is now being leveraged to predict COVID-19’s impact on healthcare resources and capacity. Grantees have developed statewide models of hospital and nursing home capacity, COVID-19 transmission dynamics within healthcare settings, models of transmission within specialty healthcare settings, and tools to leverage electronic health record data in real time to improve decision making. Learn more: [www.cdc.gov/hai/research/MIND-Healthcare](http://www.cdc.gov/hai/research/MIND-Healthcare).

**Supporting state, territorial, and local health departments: Epidemiology and Laboratory Capacity for Prevention and Control of Emerging Infectious Diseases (ELC)**
AR funding supports more than 500 epidemiologists, laboratorians, and other public health professionals that serve in their states and local communities. These experts are critical to the nation’s COVID-19 response, especially in health care. CDC provided funding to states, territories, and local jurisdictions through the ELC cooperative agreement to expand their capacity for COVID-19 response, including activities that will also help fight AR, such as improving healthcare infection control, especially in high-risk settings, and more effectively using data to drive prevention of emerging threats.

Varied by State

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

ARinvestments.cdc.gov
Preventing and responding to COVID-19 around the world
AR funding has expanded the agency’s work to improve healthcare infection prevention and control (IPC) around the world. This critical work was expanded by almost $7 million to support COVID-19 prevention and response in countries across Africa, Asia, and South America. These investments strengthened healthcare facility and personnel IPC capacity through training, mentorship, and provision of guidance and technical support.

$6,426,075

Expanding the reach of CDC’s COVID-19 response: Partnership with national organizations
Through CDC cooperative agreements, CDC supports national partner organizations to expand the reach of the COVID-19 response, including the National Association of County and City Health Officials, the American Hospital Association Health Research and Educational Trust, and the Council of State and Territorial Epidemiologists. National partner organization efforts include strengthening infection control capacity at the local level and establishing a Living Learning Network for U.S. health systems and facilities to discuss and ideate health care in response to COVID-19.

$5,900,000

Providing healthcare surveillance in hospitals and nursing homes: National Healthcare Safety Network (NHSN)
The adaptation of NHSN to the immediate needs of the emergency response is a clear example of how CDC is retooling and updating its existing surveillance capabilities to confront the pandemic and prepare for future threats. NHSN leveraged its flexible platform for HAI/AR data, as well as approximately $11 million in Congressional COVID-19 supplemental funding, to provide essential healthcare surveillance among hospitals and nursing homes and drive prompt public health actions at the federal, state, local, and healthcare facility levels. Learn more: www.cdc.gov/nhsn.

$11,017,604

Supporting SARS-CoV-2 testing in nursing homes
At the direction of the Unified Command Group, CDC awarded a contract to conduct testing for SARS-CoV-2, the virus that causes COVID-19, in U.S. nursing homes. The purpose of this work was to better understand the logistics of conducting testing in long-term care facilities, especially in states with large rural populations. The vendor piloted the testing in four states, followed by an expansion to three more. This work helped CDC better understand the challenges and opportunities of using this type of mechanism to support testing in nursing homes. Rapid detection and response to COVID-19 also helps prevent potential secondary antibiotic-resistant infections and healthcare outbreaks.

$968,700

Wastewater surveillance
In 2018, CDC supported research on the infection risk from antibiotic-resistant bacteria in wastewater. Supplementary funding to support CDC’s COVID-19 response enabled CDC to build upon this prior investment to provide critical data to support wastewater surveillance for COVID-19 and develop best practices for National Wastewater Surveillance System partners. Learn more: www.cdc.gov/coronavirus/2019-ncov/wastewater-surveillance/.

$446,152

Discovering and implementing innovative solutions: CDC Prevention Epicenters
The vanguard network of healthcare quality expertise has expanded its AR portfolio to encompass COVID-19 and is working in frontline institutions to identify new ways to combat viral and bacterial threats, protecting patients and providers from infection. Learn more: www.cdc.gov/hai/epicenters/.

$8,700,000