AR Solutions *In Action*

CDC's Investments to Combat Antibiotic Resistance Threats

FISCAL YEAR 2021

Investing to Protect the U.S. and World Against AR

Antibiotic resistance (AR), when germs do not respond to the drugs designed to kill them, threatens to return us to the time when simple infections were often fatal. CDC is committed to protecting people and the future of the healthcare, veterinary, and agriculture industries from the threat of antibiotic resistance.

The AR Investment Map showcases CDC's critical activities in the U.S. and abroad to combat AR with investments in laboratory and epidemiological expertise and public health innovation. The map also includes CDC's COVID-19 efforts related to combating AR, highlighted in a new fact sheet.

CDC supports most of these activities through its AR Solutions Initiative, while also leveraging investments from successful programs across the agency for maximum efficiency.

HIGHLIGHTS

Since 2016, CDC's AR Solutions Initiative has supported comprehensive AR work in the U.S. and leveraged lessons learned for local solutions abroad.

- Projects in the U.S. and approximately 50 countries abroad
- Nearly $645 million to 59 state and local health departments
- Supporting 500+ local AR experts
- AR Lab Network detects a resistant germ that requires investigation every 4 hours (as of 2021)

DETECTION, RESPONSE & CONTAINMENT

- **Laboratory & Diagnostics:** Gold-standard lab capacity offered to all state and regional labs through CDC's AR Laboratory Network
- **Epidemiology Capacity for Response:** Increased capacity in state and local health departments for rapid detection and faster response to outbreaks and emerging resistance related to healthcare-associated infections, foodborne bacteria, and gonorrhea—to contain and control spread

PREVENTION

- **Surveillance & Science:** More effective prevention of healthcare-associated infections, foodborne illness, and gonorrhea
- **Improved Antibiotic Use:** With partners, improve antibiotic use to ensure antibiotics work to protect patients from life-threatening infections or sepsis

INNOVATION

- **Insights for Practice:** With academic and healthcare partners, CDC is investing in innovations and collaborating with investigators to identify and implement new ways to prevent antibiotic-resistant infections and their spread
- **Research and Development:** Sharing isolates that inform development of new drugs and diagnostics, and making public CDC's sequencing data from AR pathogens to spur innovation in industry

These investments work toward meeting national goals to prevent drug-resistant infections as outlined in the *National Action Plan for Combating Antibiotic-Resistant Bacteria.*

See CDC's AR investments by state at ARinvestments.cdc.gov.

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
COVID-19: coronavirus disease 2019

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

ARinvestments.cdc.gov

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