

Investing to Protect the United States and World against Antibiotic Resistance

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 investments in the United States and abroad to combat antibiotic resistance by increasing support for laboratory and epidemiological expertise and public health innovation.

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

DETECTION, RESPONSE & CONTAINMENT

- **Laboratory & Diagnostics:** Gold-standard lab capacity offered to all U.S. state and regional labs through CDC's AR Laboratory Network, and on-the-ground lab expertise and assistance in some countries abroad
- **Epidemiology Capacity for Response:** Increased capacity in state and local health departments and some countries 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 tracking and prevention of healthcare-associated infections, foodborne illness, and gonorrhea
- **Improved Antibiotic Use:** Improving antibiotic use to ensure antibiotics are available and work to protect people from life-threatening infections or sepsis

INNOVATION

- **Insights for Practice:** Innovations and collaborations with academic and healthcare partners to identify and implement new ways to prevent antibiotic-resistant infections and their spread in the United States and abroad
- **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 www.cdc.gov/ARinvestments.

This map represents CDC's largest funding categories for antibiotic resistance. It shows extramural funding that supports AR activities from multiple funding lines.

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.

- U.S. and 19+ countries abroad
- \$300 million to 59 state and local health departments
- 500+ local AR experts
- AR Lab Network detects a resistant germ that requires investigation every 4 hours (as of 2018)
- Whole genome sequencing on 116,000+ germ samples

AR: antibiotic resistance HAI: healthcare-associated infection

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

www.cdc.gov/ARinvestments



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