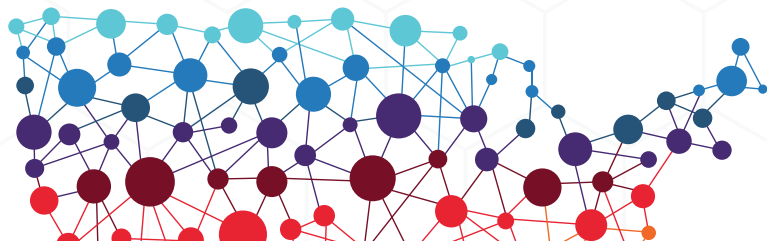# Antibiotic Resistance (AR) Solutions Initiative: AR Lab Network

CDC's AR Lab Network closes the gap between local capabilities and the data needed to combat AR in healthcare, food, and the community.

ARLABnetwork

CDC Laboratory Expertise & Coordination

7 Regional Labs

1 National Tuberculosis Molecular Surveillance Center

57 State & Local Labs, building on CDC's existing healthcare, food, and community programs.

Comprehensive lab capacity and infrastructure for AR pathogens

Cutting-edge technology, like DNA sequencing, in every state

Data to drive AR response and prevent infections

AR Lab Network

DETECT
Stronger detection of new resistance and better big-picture trend tracking to **create pathogen-specific solutions** and **support national public health strategies.**

RESPOND
When AR threats, like "nightmare bacteria" CRE, are reported, state and regional labs will work together to **identify how transmission is occurring** at the local level and **support outbreak response.**

Uncovering threats:
- *Acinetobacter* species
- *Candida* species
- *Clostridium difficile*
- Carbapenem-resistant Enterobacteriaceae (CRE)
- ESBLs to screen for colistin resistance
- *Mycobaterium tuberculosis*
- *Neisseria gonorrhoeae*
- *Salmonella*
- *Streptococcus pneumoniae*

PREVENT
Better data **for stronger infection control** to prevent spread of future AR threats.

INNOVATE
Lab samples may be available through the **AR Isolate Bank,** which researchers can use in search of better diagnostics and treatment.

Gold-standard labs are the foundation of rapid detection to combat AR. The AR Lab Network establishes infrastructure to generate actionable data for stopping spread of resistance, and informing future prevention strategies.

www.cdc.gov/DrugResistance

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