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.

**AR Lab Network**

**CDC Laboratory Expertise & Coordination**

- 7 Regional Labs
- 1 National Tuberculosis Molecular Surveillance Center
- 56 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**

**DETECT**

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

**PREVENT**

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

**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.

**INNOVATE**

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

**Uncovering threats:**

- Acinetobacter species
- Candida species
- Classtridium difficile
- Carbapenem-resistant Enterobacteriaceae (CRE)
- ESBLs to screen for colistin resistance
- Mycobacterium tuberculosis
- Neisseria gonorrhoeae
- Salmonella
- Streptococcus pneumoniae

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