# **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.



**CDC Laboratory Expertise & Coordination** 

7 Regional Labs

1 National Tuberculosis Molecular Surveillance Center

**55 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 bigpicture trend tracking to create pathogen-specific solutions and support national public health strategies.



**AR Lab Network** 

### **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
- Clostridioides difficile
- Carbapenem-resistant Enterobacteriaceae (CRE)
- Azole-resistant Aspergillus fumigatus
- 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.

The AR Lab Network generates actionable data for stopping spread of resistance and informing prevention strategies.

www.cdc.gov/DrugResistance



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