

The Centers for Disease Control and Prevention (CDC) and the U.S. Food and Drug Administration (FDA) AR Isolate Bank is a collection of antimicrobial-resistant bacterial and fungal isolates curated to help microbiologists, drug and diagnostic manufacturers, and researchers combat antimicrobial resistance (AR) – an urgent global health threat.

1 The AR Isolate Bank is advancing the fight against antimicrobial resistance.

The isolates provided by the AR Isolate Bank help in the validation of laboratory tests, support research and development for new drugs, test drug effectiveness, and detect new and emerging resistance threats. The isolates represent samples from healthcare-associated, foodborne, and community-associated infections.



2 The AR Isolate Bank updates panels with additional isolates based on what types of resistance are emerging and spreading.

Isolates are gathered through CDC’s outbreak response and surveillance programs, reference laboratories, and external collaborators. They are characterized, sequenced and then thoughtfully curated to increase laboratory efficiencies and public health innovations. Isolate data is accessible on the AR Isolate Bank website and can also be downloaded for easy laboratory access.



3 Users can request custom panels.

A panel refers to a set composed of unique isolates. Custom panels are sets of AR Isolate Bank isolates that belong to other panels. These sets are assembled with desired attributes for a specific use. For example, the Fluoroquinolone *Pseudomonas aeruginosa* (*P. aeruginosa*) Verification Panel was assembled to perform verification and validation studies for *P. aeruginosa* and any of the fluoroquinolones approved to treat infections caused by these bacteria.

4 Isolate panels are refreshed frequently.

As new antibiotics and antifungals are developed and approved, isolate panels are refreshed to ensure the most up-to-date data and information is available to users. Similarly, new and contemporary isolates are added to the collection over time.

5 Isolate panels are provided at no cost.

The AR Isolate Bank does not charge a fee for isolate panels. The requestor, however, pays for shipping. Isolates are shipped as frozen aliquots using overnight services.

Through the AR Isolate Bank, microbiologists, public health laboratories, clinical laboratories, drug manufacturers, and researchers are better equipped to combat AR and prevent its spread. To learn more about the AR Isolate Bank, search for a specific isolate or panel, register for an account, and order isolates, visit <https://www.cdc.gov/ARIsolateBank/>.

