

About the Antimicrobial Resistance Isolate Bank



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. Located at and managed by CDC, in collaboration with the FDA, the AR Isolate Bank offers a unique solution to experts seeking to find the latest and highest quality isolates with known resistance.

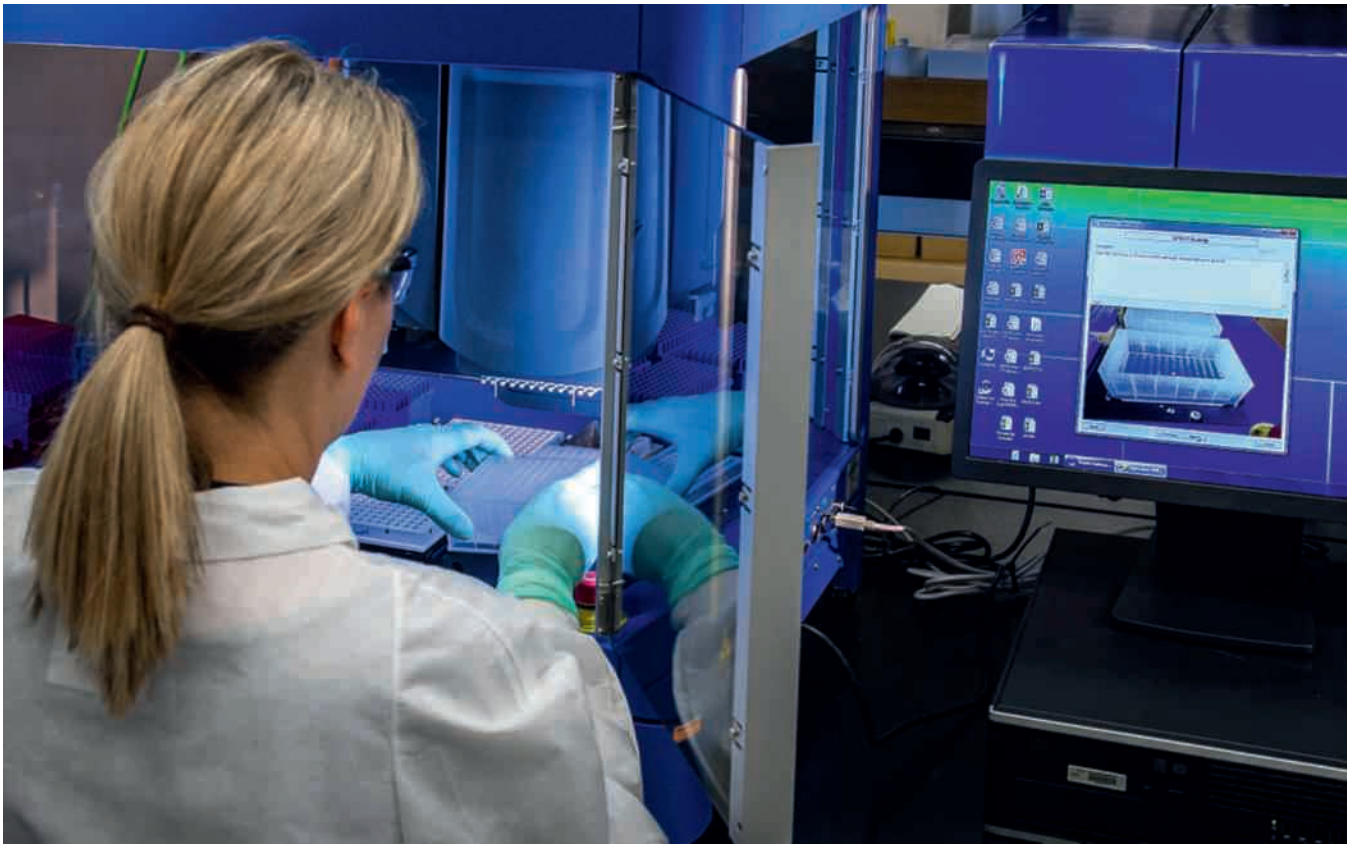
Advancing the Fight Against AR

The AR Isolate Bank helps to:

- **Validate laboratory methods** improving the accuracy of diagnostic testing
- **Inform research and development** to create drugs like antibiotics and antifungals, develop new and improved diagnostics, and support applications to the FDA
- **Perform testing** to ensure drug effectiveness and better patient treatment
- **Study pathogenic mechanisms** and genotypic basis of resistance
- **Detect new and unusual public health resistance threats** to rapidly recommend infection control measures

About the Isolates

The AR Isolate Bank has one of the largest collections of isolates gathered from national reference laboratories, CDC's outbreak response and surveillance programs, and taken from specimens in health care, food, and the community. Isolate panels (sets of unique isolates) are accompanied with antimicrobial susceptibility profiles generated by gold standard methods, genetic profiles of resistance mechanisms, and whole genome sequencing data and analysis. Isolate panels are designed to target specific needs/intended uses, i.e., carbapenem validation, aminoglycoside and/or tetracycline validation, enteric pathogens, etc. **Isolates are provided at no cost to approved institutions. Users only pay for shipping.**



AR Isolate Bank offerings are based on the level of concern to human health. Examples of pathogens, include:

- Azole-resistant *Aspergillus fumigatus*
- Carbapenem-resistant *Acinetobacter*
- *Candida auris*
- *Clostridioides difficile*
- Carbapenem-resistant *Enterobacterales*
- Drug-resistant *Candida* species
- Drug-resistant *Neisseria gonorrhoeae*
- *Pseudomonas aeruginosa*
- *Staphylococcus* species
- Vancomycin-resistant *Enterococcus*

How Isolates are Used



Microbiologists and laboratory directors use AR Isolate Bank isolates to validate new laboratory tests, which can help improve patient care and safety.



Drug and diagnostic manufacturers use AR Isolate Bank samples to test and develop new products, like diagnostic assays and new antibiotics, and accelerate research and development.



Researchers use AR Isolate Bank isolates to build solutions against the latest resistant threats.

Finding and Ordering Isolates

To browse a complete list of panels, search for a specific isolate or panel, register for an account, and order from the AR Isolate Bank, visit <https://wwwn.cdc.gov/ARIsolateBank/>.

