

ADDRESSING THE GLOBAL ANTIBACTERIAL RESISTANCE THREAT

Innovation to prepare for the future

CARB-X accelerates the early development of innovative products to prevent, diagnose and treat serious antibiotic-resistant bacterial infections and promote global health security.



Global Reach

92 projects funded in **12** countries since launch – **\$361M** in non-dilutive awards.



Innovative Pipeline

60 active projects:* **19** antibiotics with novel classes, **16** non-traditional therapeutics, **8** vaccines, **4** preventatives (CRISPR phage, microbiome, antibody), and **12** rapid diagnostics.



Progress of Projects

9 projects graduated from CARB-X portfolio: **2** secured regulatory approvals, **1** in New Drug Application stage, **1** in Phase 2, and **1** awarded Advanced R&D contract with BARDA. CARB-X has supported **9** projects through IND or IND-equivalent approvals, and **10** projects in Phase 1, of which **8** included First-in-Human activities.



Funding Rounds

8 funding rounds. **1163** applications reviewed from **39** different countries.



Portfolio Vision & Strategy

CARB-X supports the world's largest, most scientifically diverse antibacterial portfolio and selects projects aligned with an integrated strategy focused on the most serious bacterial threats.



Expert Wraparound Support

CARB-X delivers expert support to product developers through its R&D team, global network of **7** accelerators and more than **120** subject matter experts around the world.



Bacteria Ignore Borders

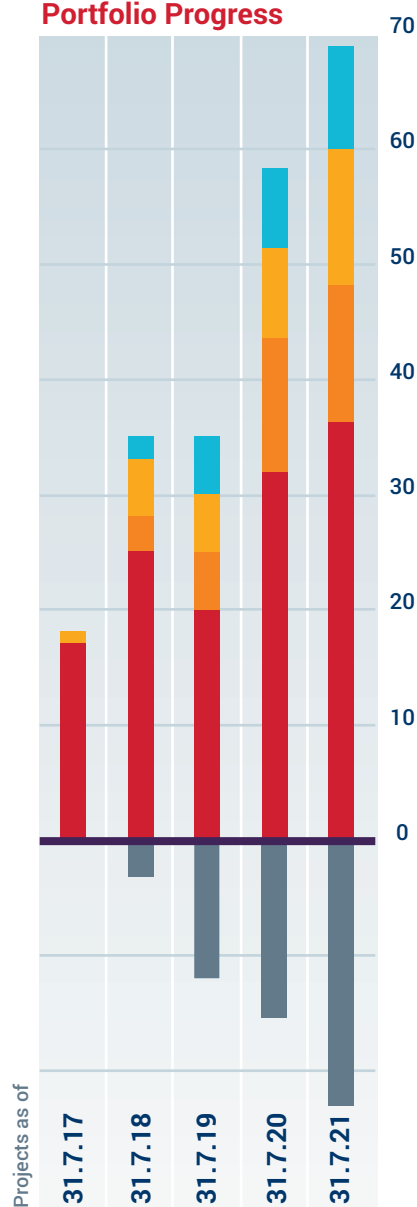
CARB-X funds diverse projects including many focused on health challenges in low- and middle-income countries.



Stewardship & Access

Each CARB-X-funded project is governed by stewardship and access policies to ensure that, if approved, it is used responsibly and is made accessible to patients who need it.

CARB-X 5-year Portfolio Progress



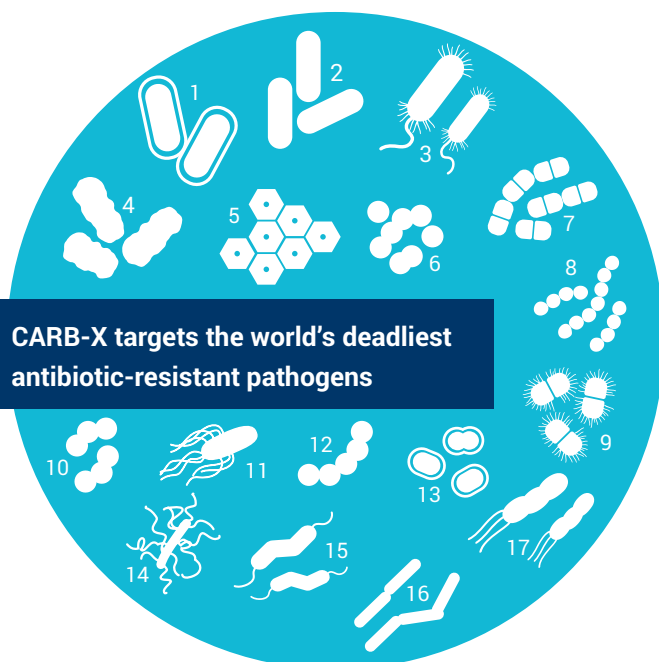
* As of 31 July, 2021

Active: Diagnostics (Blue) Graduates (Yellow) Formerly Funded (Orange) Active: Therapeutics (Red)

Global leader in accelerating antibacterial innovation

The CARB-X Advantage

- Focus on the most serious bacteria in the world
- Select the most promising innovations from around the world to advance the best science
- Provide funding and access to global expert networks to solve specific and cross-portfolio problems and accelerate products towards patients
- Coordinate with other key stakeholders to maximize impact



CARB-X targets the world's deadliest antibiotic-resistant pathogens

Numbers in () indicate the number of projects* that focus on the pathogen. Some projects focus on more than one pathogen

1. *K. pneumoniae* (37) 2. *E. coli* (35) 3. *P. aeruginosa* (28) 4. *E. cloacae* (28)
 5. *A. baumannii* (23) 6. *S. aureus* (20) 7. *E. faecium* (16) 8. *S. pneumoniae* (14)
 9. *N. gonorrhoeae* (7) 10. *S. pyogenes* (group A) (4) 11. *Salmonella* sp (4)
 12. *S. agalactiae* (group B) (2) 13. *H. influenzae* (2) 14. *C. difficile* (1)
 15. *Campylobacter* sp (1) 16. *Shigella* sp (1) 17. *H. pylori* (1)

Trusted Partnership

CARB-X is a non-profit public-private partnership, led by Boston University and dedicated to revitalizing the world's early development antibacterial pipeline. CARB-X funders are investing up to \$480 million from 2016-2022 to support the development of innovative therapeutics, preventatives and rapid diagnostics



CARB-X focuses on serious infections and diseases

Numbers in () indicate number of projects* targeting indication

1. **LRTI**: lower respiratory tract infections eg pneumonia (25)
 2. **BSI**: bloodstream infections (sepsis) (19)
 3. **cUTI**: urinary tract infections (18)
 4. **IAI**: intra-abdominal infections (8)
 5. **STI**: sexually transmitted infections (gonorrhoea +/- chlamydia) (7)
 6. **GI**: intestinal microbiome modifying (transplant, cancer, *C. difficile* infection patients) (5)
 7. **CF**: cystic fibrosis (5)
 8. **ABSSI**: serious skin infections (4)
 9. **Wounds**: wound infections - surgery (4)
 10. **PJI**: prosthetic joint infections (4)
 11. **URTI**: upper respiratory tract infections (3)



CARB-X

Combating Antibiotic-Resistant Bacteria

* As of 31 July, 2021

This fact sheet is supported by the Cooperative Agreement Number IDSEP160030 from ASPR/BARDA and by awards from Wellcome Trust, Germany's Federal Ministry of Education and Research, the UK Department of Health and Social Care's Global Antimicrobial Resistance Innovation Fund (GAMRIF), and the Bill & Melinda Gates Foundation. The contents are solely the responsibility of the authors and do not necessarily represent the views of CARB-X funders.

carb-x.org

BOSTON UNIVERSITY