

Table 2B-3. MIC Breakpoints for *Burkholderia cepacia* Complex

| Testing Conditions | | QC Recommendations |
|--------------------|---|---|
| Medium: | Broth dilution: CAMHB | Refer to the following: <ul style="list-style-type: none"> • Table 5A-1 that lists acceptable QC ranges • Appendix I to develop a QC plan |
| Inoculum: | Broth culture method or colony suspension, equivalent to a 0.5 McFarland standard | |
| Incubation: | 35°C ± 2°C; ambient air; 20-24 hours | |

General Comments

- (1) Minimal inhibitory concentration (MIC) and disk diffusion breakpoints for *B. cepacia* complex organisms were removed based on data showing that 2 CLSI reference antimicrobial susceptibility testing (AST) methods, broth microdilution (BMD) and agar dilution, do not correlate.¹ These findings are supported by additional studies conducted by European Committee on Antimicrobial Susceptibility Testing (EUCAST) and a Brazilian study demonstrating problems with *B. cepacia* complex AST.^{2,3}
- (2) Laboratories can consider adding the following comment to the laboratory report: “Antimicrobial susceptibility testing is not routinely performed for *B. cepacia* complex due to the lack of accurate test methods. MICs for ceftazidime, levofloxacin, meropenem, minocycline, or trimethoprim-sulfamethoxazole with wild-type isolates are high and might be above the MICs typically achievable by routine antimicrobial dosing.”
- (3) If testing is performed, reference BMD (frozen) is the only reproducible method and laboratories might consider including the comment, “correlation of MIC values with clinical outcome is not known.”

NOTE: Information in boldface type is new or modified since the previous edition.

References for Table 2B-3

- ¹ Jorth P, Manuel C, McLemore T, et al. Evaluation of antimicrobial susceptibility testing methods for *Burkholderia cepacia* complex isolates from people with and without cystic fibrosis. *J Clin Microbiol*. 2025; 63(2):e0148024. doi:10.1128/jcm.01480-24
- ² Wootton M, Davies L, Pitman K, Howe RA. Evaluation of susceptibility testing methods for *Burkholderia cepacia* complex: a comparison of broth microdilution, agar dilution, gradient strip and EUCAST disc diffusion. *Clin Microbiol Infect*. 2020; S1198-743X(20)30708-4. doi:10.1016/j.cmi.2020.11.012
- ³ Fehlberg LCC, Nicoletti AG, Ramos AC, et al. *In vitro* susceptibility of *Burkholderia cepacia* complex isolates: comparison of disk diffusion, Etest®, agar dilution, and broth microdilution methods. *Diagn Microbiol Infect Dis*. 2016; 86(4):422-427. doi:10.1016/j.diagmicrobio.2016.08.015