

**Table 1B-3. *Burkholderia cepacia* Complex**

Refer to Table 2B-3 and Appendix F for information regarding testing of *B. cepacia* complex.

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

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

Testing Conditions		QC Recommendations	
Medium:	Broth dilution: CAMHB	<b>Refer to the following:</b> <ul style="list-style-type: none"><li>• Table 5A-1 that lists acceptable QC ranges</li><li>• Appendix I to develop a QC plan</li></ul>	
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 two CLSI reference antimicrobial susceptibility testing (AST) methods, broth microdilution (BMD) and agar dilution, do not correlate. 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.<sup>1,2</sup>
- (2) Epidemiological cutoff values (ECVs) are available in Appendix F, which are for epidemiological use only. In several cases, ECVs are above MICs typically achievable by routine antimicrobial dosing for similar organisms.
- (3) 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.”
- (4) 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

- <sup>1</sup> 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
- <sup>2</sup> 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