



Technical Bulletin

Microbiology-MIC Panel Change

By Popular Demand: A Change to the MIC Panel

Phoenix Central Laboratory uses the minimum inhibitory concentration (MIC) method for bacterial susceptibility testing on pathogens isolated from urine cultures. The MIC value gives the clinician the dosage level information needed to achieve a therapeutic result.

In the past years the MIC panel has included ampicillin, amoxicillin-clavulanic acid ("Clavamox"), cephalothin, chloramphenicol, enrofloxacin, tetracycline, and trimethoprim/sulfa. These are antibiotics which are known to concentrate in the bladder thus increasing the likelihood of treatment success.

We have changed this configuration for 2005. Marbofloxacin ("Zeniquin") has been added to the panel in the place of chloramphenicol. The toxicity of chloramphenicol in humans has been a topic of discussion in the past several years. Chloramphenicol has also shown to be toxic to animals with impaired hepatic or renal function. Marbofloxacin, on the other hand, is generally well-tolerated, easy to administer and approved for treatment of feline and canine patients.

Chloramphenicol is still available by request for susceptibility testing using a disk diffusion method. It will also be added to the "extended panel" that we offer for resistant or problematic bacterial infections.

Please feel free to contact the Microbiology Department if you have any questions, 1-800-347-0043, or email to carolf@pclv.net