

# Laboratory News

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## New antimicrobial susceptibility testing (AST) interpretive criterion: Susceptible Dose-Dependent

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On or around 7/24/2023, the AST interpretation of Susceptible, Dose-Dependent (SDD) will replace Intermediate when tested against members of the Enterobacterales group (e.g. *E. coli*, *Klebsiella*, *Enterobacter*) of Gram negative bacteria for these drugs: 1) Cefepime  
2) Piperacillin/tazobactam.

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### Susceptible, Dose-Dependent (SDD) Interpretation

Susceptible Dose-Dependent (SDD) is an interpretation of the minimum inhibitory concentration (MIC) wherein the susceptibility is dependent on the dosing regimen that is used. In isolates where susceptibility testing results in an SDD interpretation, the necessary dosing regimen will be listed in the microbiology results commentary.

Note that the concept of SDD has historically been included in the intermediate (I) category. However, an intermediate result could also be due to other factors not overcome by dosing. SDD seeks to unambiguously call out those isolates that test as neither susceptible nor resistant, but are reasonably expected to respond favorably to a particular dosing schedule.

## Suggested Dosing

Suggested adult dosing for Enter\_isolates reported as SDD are:

- Cefepime-SDD, 2g IV q8h infused over 4 hours.
- Piperacillin/tazobactam-SDD, 4.5 g IV q8h infused over 4 hours.

Pediatric dosing of cefepime and piperacillin/tazobactam for Enterobacterales isolates reported as SDD should generally be on the higher end of the regular dosing range and extending the infusion should be considered. For questions and consults regarding this dosing please consider consulting the pediatric infectious diseases physician and/or the infectious diseases pharmacist.

## Questions

For therapeutic questions please contact the Marshfield Clinic pharmacy drug information service (x 19800).

For test information contact Dr. Thomas Novicki or Dr. Sophie Arbefeville (x16300).