Alberta Health Services

PROVLAB ALBERTA

Laboratory Bulletin

Date: **March 11, 2013**

To: **Infectious Diseases Physicians, Transplant Programs and Transplant Physicians, Critical Care Physicians, and Laboratory Directors and Managers**

From: **Provincial Laboratory for Public Health (ProvLab)**

Re: **New Clinical Breakpoints for Interpreting Antifungal Susceptibility of *Candida* spp.**

PLEASE POST OR DISTRIBUTE AS WIDELY AS APPROPRIATE

Key Message:

Antifungal susceptibility testing is routinely performed for clinically relevant isolates of *Candida* to aid targeted treatment decisions. The interpretive breakpoints used by clinical laboratories to determine antifungal susceptibility and resistance have been recently updated by the Clinical and Laboratory Standards Institute (CLSI).

As of March 11th, 2013, the new interpretive breakpoints for *Candida* species will be reported according to the current CLSI recommendations.

Why this is important:

Advances in our understanding of clinical outcomes and antifungal resistance mechanisms in the setting of invasive candidiasis have improved the predictive value of susceptibility results (minimum inhibitory concentrations; MIC, mg/L) for clinical isolates of *Candida*. Although the available literature and local experience indicate that antifungal resistance rates are low and unchanging, cases of clinical resistance to the azole and echinocandin agents have been reported.

The new interpretive breakpoints are species-specific for the azoles and the echinocandins against the most common *Candida* species; *C. albicans, C. glabrata, C. tropicalis, C. parapsilosis, and C. krusei*. These susceptibility results will be available sooner now that testing only requires 24 hours versus 48 hours and will be reported in Alberta Netcare with the corresponding MIC value.

Please note that the susceptibility of *C. glabrata* to voriconazole will no longer be reported; currently, there is insufficient data to demonstrate a correlation of susceptibility testing and clinical outcome for *C. glabrata* infections treated with voriconazole. In this case, the voriconazole MIC will be the only value reported.

Inquiries and requests for testing may be directed to:

- Dr. Jeff Fuller, Program Leader, Medical Mycology, AHS / ProvLab at: jeff.fuller@albertahealthservices.ca or by phone at: 780-407-2767.
- For specimen collection information, please refer to the ProvLab Guide to Services at: http://www.provlab.ab.ca/guide-to-services.pdf or http://www.albertahealthservices.ca/3217.asp

This bulletin has been reviewed and approved by Dr. Graham Tipples, Medical/Scientific Director, Provlab