



## CLINICAL PRACTICE CHANGE

**Date:** November 9, 2012

**To:** **Infectious Diseases Physicians using the HSC Clinical Microbiology Laboratory**

**From:** Dr. Michelle Alfa, Medical Director, Clinical Microbiology Discipline, DSM  
*Michelle Alfa*  
 Shirley Hoban, Technical Director, Clinical Microbiology Discipline, DSM  
*Shirley Hoban*

**Re:** **Discontinuation of Urine Cell Count at HSC Clinical Microbiology Laboratory Effective Dec 1, 2012**

The Clinical Microbiology Laboratory at the HSC has offered a Urine Cell Count Test for decades. This test has been used exclusively by a select group of Infectious Diseases physicians treating a subset of patients with complex urinary tract infections. This test has never been validated for clinical use.

In 2011, the clinical laboratories at the Health Sciences Centre and St. Boniface Hospital were accredited by the College of American Pathologists (CAP) as mandated by the province of Manitoba. As an accredited laboratory, the HSC Clinical Microbiology Laboratory can only offer tests that have been validated using a protocol acceptable to CAP, that have a mechanism of quality control for individual tests, and have an ongoing external proficiency testing program (such as offered by CAP, CMPT [Canadian Microbiology Proficiency Testing], Digital PT, etc.). The Urine Cell Count Test does not meet any of these three requirements. From Jan 2012 to Nov 1, 2012 there has been 11 such tests ordered again indicating that maintaining staff competency for such a low volume test without any EPT is essentially impossible. This issue was identified in recent internal audits done to prepare Microbiology for our upcoming CAP accreditation site visit. It is for these reasons that the HSC Clinical Microbiology Laboratory will no longer be able to offer this test effective Dec 1, 2012.

The HSC Clinical Microbiology Laboratory is aware that the select group of physicians that order the Urine Cell Count test feel it is superior to a urinalysis ordered through the Clinical Chemistry Laboratory. As well, we have reviewed the references that support the Urine Cell Count (Saito & Kawada, Infection 22 [1994];suppl 1:S36-S37; Stamm, Am. J. Med. [1983] July:53-58; Rubin et al., Clin. Infect. Dis. [1992] 15 [suppl 1]:S216-S227). We have explored unconventional methods to attempt to validate this test and to find a mechanism of external proficiency testing but have been unsuccessful principally because other clinical microbiology laboratories in Canada do not offer this test. We have also performed an internal review of 22 patient results at the HSC comparing the Urine Cell Count result with the Urinalysis result and found concordance between the results in 18/22 cases.

In closing, we realize that for a select group of patients that physicians believe the Urine Cell Count is a useful test, however, DSM laboratories cannot continue to offer it as continuing to do so is in conflict with our CAP accreditation.

If you have further questions, please don't hesitate to contact Dr. Michelle Alfa (204 237-2105) or Shirley Hoban (204 237-2073).