

MEMORANDUM

Division of Microbiology
Department of Pathology and Laboratory Medicine
Mackenzie Building, Queen Elizabeth II Health Sciences Centre
5788 University Avenue, Halifax, Nova Scotia, B3H 1V8
Tel: 902 473 6624 Fax 473 4432

TO: Capital Health Physicians, Clinics

FROM: Dr. Todd Hatchette / Dr. Jason LeBlanc

Directors, Immunology / Virology Section

DATE: January 17, 2014

RE: Discontinuation of routine Vancomycin peak levels

An audit of Vancomycin levels ordered from July to October of 2012 revealed that, of the 1567 tests ordered, only 38% were pre- infusion (or trough) levels. The remainder were post-infusion (or peak) levels (5%) or unspecified (57%). Audit results are available upon request.

Routine **PEAK LEVELS ARE NOT NECESSARY** because:

- Vancomycin's activity depends on the duration of time its concentration exceeds the minimum inhibitory concentration (MIC) of the bacteria (time dependent killing), best measured by collecting a trough level within 30 minutes of the next dose.
- There is no evidence that peak levels are associated with improved clinical outcomes.

As of, February 3, 2014, routine Vancomycin peak level testing will be discontinued and requests automatically cancelled.

Occasionally, pharmacists may use peak levels to tailor dosing in difficult to treat infections. In these circumstances, they should contact the Microbiologist on call for approval.

It is essential that the laboratory be provided with the necessary information to ensure appropriate testing to support patient care. Please indicate on the requisition whether the level is a pre-infusion vancomycin level or a random level (acceptable in a patient with severe renal impairment). Lack of this information will delay processing of the specimen.

If there are any questions regarding the results they can be directed to Drs Hatchette and/or LeBlanc (473-6885/7698).

Thank you for your attention,