

Provincial Laboratory Services



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Health PEI
One Island Health System

Recommended Practice Changes in Bacterial Culturing and Modifications to Other non-COVID Testing to Provide Support to COVID Response: Step 1

July 17, 2020

This information applies to: Island Physicians, Nurse Practitioners and Joint Response Team Leaders

Microbiology laboratory services continue to expand our capabilities and flexibility to test for COVID-19 virus on PEI. At the same time clinics and operating rooms are ramping up when they would typically slow down for the summer. Microbiology has essentially doubled its service hours at the QEH as well as its equipment but at the same time will need to also recharge with planned vacations throughout the Summer. Please redouble your efforts to test wisely and consider empiric therapy when appropriate. We are aiming for a 20% reduction in non-COVID testing from the average monthly levels.

Urine Culture (4 Points):

1. Urine cultures are no longer routinely necessary for empiric cystitis therapy in adult females if MacroBid (nitrofurantoin), fosfomycin (Special authorization), or co-trimoxazole is used. Please see the most recent Health PEI guidelines (web link above) on dosing for adult males and females dosing, including the use of Vagifem in post-menopausal women. A urine collection container, an appropriately filled out request form marked failed initial therapy, and a specimen collection container can be provided to your patient and utilized if they do not have improvement in 24-36 hours of starting cystitis therapy as an alternative strategy.
2. For adults, consider urinalysis alone. if negative or trace for Leukocyte esterase reassure, explore alternative diagnoses, and increase hydration (see next point).
3. Senior population hydration is critical to urinary tract infection prevention and symptom management and hydration itself with improve the nonspecific symptoms usually attributed to a UTI at least 50% of the time. There is a treasure chest of resources available on the AMMI.ca national infectious diseases website including water intake charts (adapted from a Health PEI product), algorithm, letter to family, and educational resources. The educational process is called #symptomfreeletitbe and the direct link is here: <https://www.ammi.ca/?ID=127>. These resources will help with communication that foul smelling or cloudy urine is not a symptom.
4. Due to current workload, we will suspend the routine semi-automatic practice of faxing early reports on urine cultures to Long-term care facilities.

Sputum Culture: Sputum is a notoriously difficult specimen to interpret, and significant resources are spent in the laboratory on workup in situations that could be wisely treated empirically. For instances, avoid macrolides due to drug resistance especially as monotherapy. For adults use high dose amoxicillin for lateralizing pneumonia, use cefuroxime if there is a penicillin allergy. Consider doxycycline for all other mild to moderate cases when not contraindicated. See our CAP guidelines for details and take note of previous antibiotics in the past (3 to 6 months) when selecting empiric therapy. At this stage, we are recommending that sputum cultures be limited to those collected by RT (induced sputums), or when there is specialist care actively involved.

Wound Cultures: For diabetic foot or wound specimens, consider empiric therapy including topical antibiotics or similar agents like Iodosorb for superficial ulcerations. Cefadroxil (On formulary) 500 mg 1g po bid has excellent Streptococcus spp. and routine Staphylococcus aureus activity. Consider Cefuroxime if documented penicillin allergy (according to our guidelines / allergy matrix). If wound / ulcer cultures are provide please do so only after debridement / cleaning. If there is foul smell then consider supplemental anaerobic coverage to the above antimicrobial regimens. (Check antibiogram for details on anaerobic coverage).

Viral testing Notes:

- Skin samples: For most adults, herpes and zoster/shingles are clinical diagnosis that rarely require viral confirmation. Testing frequency will be reduced.
- Influenza Season is currently over. Testing requests will be routinely cancelled unless discussed with on call services.
- Routine Hepatitis C viral load and, HIV viral load, has resumed at our reference laboratory.
- Measles, Mumps, and Rubella IgG (for immunity) will go from once a week testing to twice a month testing. Rush requests can be reviewed as necessary.

Miscellaneous Notes:

- H. pylori stool antigen testing will go from three times a week to weekly.
- Dermatophytes (nail/skin/hair) will be limited to fungal stains only unless culture is specifically requested or if ordered by Dermatology.

Thank you for your ongoing assistance to support your microbiology laboratories to use testing wisely so we can most effectively respond to the Islands evolving needs. Reduction in unnecessary testing will greatly assist us in new equipment and new test development, which is required to prepare for the coming respiratory virus season. If you have any questions or suggestions on further implementing wise testing practices please contact Dr. German at 902-894-2515 / GJGerman@gov.pe.ca or Brian Timmons at 902-894-2964 or at BDTimmons@ihis.org.

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