Health Care Providers Newsletter

January 2026

Alpha thalassemia testing changes in LifeLabs BC

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Alpha thalassemia is a hereditary blood disorder marked by reduced production of alpha-globin chains, leading to an imbalance between alpha and beta globin. This imbalance causes varying degrees of ineffective erythropoiesis, shortened red blood cell viability, chronic hemolytic anemia, and associated complications. The clinical manifestations depend on the underlying genotype and can range from an asymptomatic or mildly affected carrier state to severe, transfusion-dependent anemia or even fatal outcomes. To improve patient care, LifeLabs is updating its alpha thalassemia PCR to routinely test for all 7 of the most common deletions (-a3.7, -a4.2, -(a)20.5, --SEA, --MED, --FIL, --THAI), when clinically indicated. These 7 deletions are found in the majority of alpha-thalassemia cases globally. The rare Hb Constant Spring and Hb Quong Sze non-deletional variants will no longer be detected. Other rare alpha globin gene deletions, non-deletion mutations, gene duplications and mutations of the regulatory region will also not be detected.

LifeLabs BC Healthcare Providers' Conference 2025

Dr. Eugene Yeung, MD, FRCPC, FCCM, Medical Microbiologist

The LifeLabs Healthcare Providers' Conference at Hilton Vancouver Metrotown on October 9, 2025 was a success! The conference helps bridge the worlds of lab medicine and primary care. We want to thank all the attendants and presenters for their participation.

(Photo credit: Dr. Romina Reyes & Dr. Eugene Yeung)

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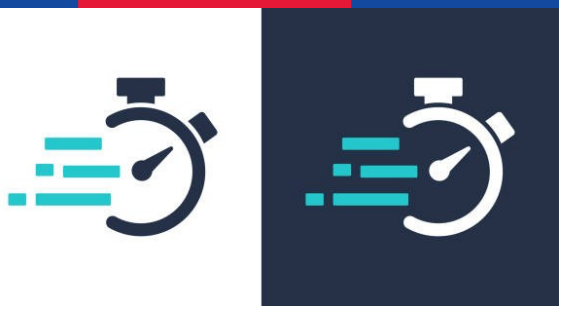
Urgent (STAT) Test Requests

Julie Kelly, MLT, Senior Manager, Quality & Regulatory Affairs

Dr. Romina Reyes, MD, FRCPC, Medical Director



As a community-based lab, LifeLabs offers limited urgent (STAT) testing, where samples are prioritized upon receipt at the testing facility. Results of Urgent (STAT) tests are reported to the ordering practitioner within 8 hours of receipt at the testing facility. Due to regional differences in testing availability, Urgent (STAT) requests may require the patient to attend the local hospital for testing. The following list of tests are available on an Urgent (STAT) basis:

Neonatal Bilirubin (less than 1 year)	Malarial parasites (falciparum or un speciated)
Calcium	Potassium
Estradiol (fertility only)	Prothrombin time (INR)
Glucose	Sodium
Hematology panel (or any component)	

LifeLabs does not perform Urgent (STAT) testing for acute care purposes. All patients with orders for Urgent (STAT) D-Dimer or Troponin I testing will be directed to attend the nearest hospital.

Sample Collection and Handling Resources

Julie Kelly, MLT, Senior Manager, Quality & Regulatory Affairs

Dr. Romina Reyes, MD, FRCPC, Medical Director

There are several resource documents available at www.LifeLabs.com to support healthcare providers to collect and submit quality samples to LifeLabs for testing. Several of these resource documents have recently been updated:

- Completing a LifeLabs Requisition
- Patient Identification and Sample Labeling

◊ Unless deemed irretrievable, samples that are unlabeled, incompletely labeled, or illegibly labeled will be rejected.

- Specimen Packaging Guidelines
- Biopsy Transport Bag Instructions (Lower Mainland and Vancouver Island only)

Please see Specimen Collection and Handling for all available documents.

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Diagnostic Accreditation Program

Test for Bacteria in Urine: Consider 'Macroscopic – Urine Culture if Pyuria or Nitrite Present' instead of 'Routine Culture – Urine'

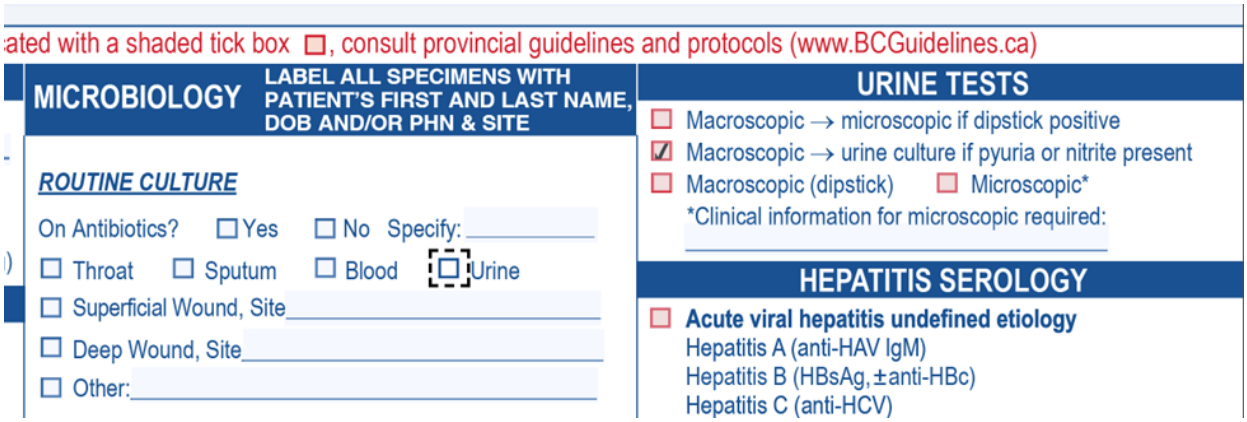
Ms. Polina Novoseltseva BSc, MSc, Medical Student

Dr. Eugene Yeung, MD, FRCPC, FCCM, Medical Microbiologist

According to the Infectious Disease Society of America (IDSA) 2019 Clinical Practice Guideline for the Management of Asymptomatic Bacteriuria, treatment is generally not recommended for asymptomatic bacteriuria except in two situations:

1. Pregnancy, and
2. Prior to endoscopic urologic surgeries.

In other situations, a good practice to consider is to check the box labeled **'Macroscopic → urine culture if pyuria or nitrite present'** in the LifeLabs requisition form (box with a checkmark in the form screenshot provided). This approach allows urine culture to proceed only if either pyuria or nitrites are detected, helping screen out negative samples and supporting antimicrobial stewardship by reducing unnecessary antibiotic in accordance with Choosing Wisely Canada.



ated with a shaded tick box ☐, consult provincial guidelines and protocols (www.BCGuidelines.ca)

MICROBIOLOGY — LABEL ALL SPECIMENS WITH PATIENT'S FIRST AND LAST NAME, DOB AND/OR PHN & SITE

ROUTINE CULTURE

On Antibiotics? ☐ Yes ☐ No Specify: _____

☐ Throat ☐ Sputum ☐ Blood ☐ Urine

☐ Superficial Wound, Site _____

☐ Deep Wound, Site _____

☐ Other: _____

URINE TESTS

☐ Macroscopic → microscopic if dipstick positive

☑ Macroscopic → urine culture if pyuria or nitrite present

☐ Macroscopic (dipstick) ☐ Microscopic*

*Clinical information for microscopic required: _____

HEPATITIS SEROLOGY

☐ **Acute viral hepatitis undefined etiology**

Hepatitis A (anti-HAV IgM)

Hepatitis B (HBsAg, ±anti-HBc)

Hepatitis C (anti-HCV)

There are a few situations where the **'Routine Culture: Urine'** box is more appropriate – specifically when both nitrite and pyuria may produce false-negative results – these are outlined below.

A false-negative nitrite result may happen in (PMID: 35839369):

- Immunocompromised patients,
- Frequent urination, where urine does not rest in the bladder for more than 4 hours, a time required for most bacteria to convert nitrates to nitrites,
- UTIs caused by *Enterococcus* or *Pseudomonas aeruginosa*, as these organisms do not convert nitrate to nitrite.

A false-negative pyuria result may happen in:

- Children with suspected *Enterococcus*, *Klebsiella*, or *Pseudomonas aeruginosa* UTIs, who as they are less likely to exhibit pyuria (PMID: 27328921).

In rare cases where both nitrite and pyuria are suspected to be falsely negative (e.g. a child with suspected *Enterococcus* UTI), please select the **'Routine Culture: Urine'**. If the ordering clinician has direct access to the urine sample, a dipstick urinalysis may be performed to check for leukocyte esterase (indicator of pyuria) and nitrites at the collection point before the sample is sent to LifeLabs. To avoid false results, the urine sample should be refrigerated no later than 30 minutes after collection (PMID: 38442248).

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