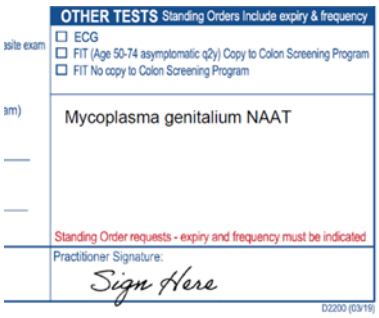
Health Care Providers Newsletter
June 2022

Mycoplasma genitalium testing now available at LifeLabs

Dr. Miguel Imperial, Medical Microbiologist, MD, FRCPC

LifeLabs is pleased to announce the launch of *Mycoplasma genitalium* testing in British Columbia as of June 20, 2022. *M. genitalium* is a bacterial pathogen that causes genitourinary tract infection. The Canadian STI guidelines recommend testing for *M. genitalium* as a cause of persistent or recurrent urethritis (in men) or for cervicitis or pelvic inflammatory disease (in women), when chlamydia and gonorrhea testing is negative and empiric treatment for gonorrhea and chlamydia has not resolved symptoms (1).

LifeLabs is offering private-pay testing for *M. genitalium* by nucleic acid amplification testing from urine samples or swabs (cervical, urethral, vaginal, or meatal). *M. genitalium* testing is not currently a publicly-insured test on the Laboratory Payment Schedule.


OTHER TESTS Standing Orders Include expiry & frequency

ECG

FIT (Age 50-74 asymptomatic q2y) Copy to Colon Screening Program

FIT No copy to Colon Screening Program

Mycoplasma genitalium NAAT

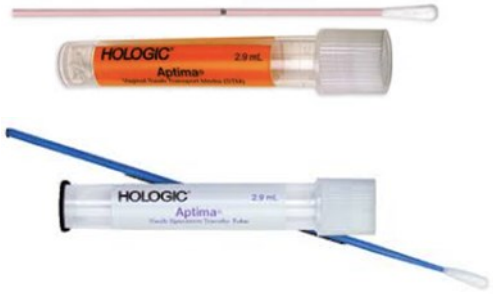
Standing Order requests - expiry and frequency must be indicated

Practitioner Signature:

Sign Here

D2200 (03/19)

Sample of a requisition ordering *M. genitalium* testing



Use the Aptima Unisex kit (above) to collect vaginal swabs for *M. genitalium* testing; collect cervical, urethral, and meatal swabs using the Aptima Multitest kit (below)

Patients are required to pay for testing in-person, at a cost of $75. **For urine collection**, please send your patient to a LifeLabs® PSC with a signed requisition form with the test “Mycoplasma genitalium NAAT - urine” written in the “Other Tests” section. Our staff will collect payment and provide a container to the patient for sample collection. **For swab-based collection**, you can collect the sample at your clinic, provide your patient with a signed requisition with the test “Mycoplasma genitalium NAAT” written in the “Other Tests” section (see sample above), and direct your patient to visit a LifeLabs® PSC for payment and sample drop-off. No appointment is required.

If testing for chlamydia or gonorrhea is also required, an additional sample should be submitted. Test results will be available in 2-7 days, depending on geographic location.

Information on ordering supplies for the *M. genitalium* test in British Columbia can be found in the healthcare provider supplies portal. *M. genitalium* may not be listed directly on all regional forms. If it isn’t listed in your region, simply add, “*M. genitalium* collection supplies” to the blank spaces left at the bottom of the form before faxing in your order.

For more information, please contact our Customer Care Centre at 1-877-849-3637.

References

1—Public Health Agency of Canada. 2021. Canadian Guidelines on Sexually-Transmitted Infections. Available online at Mycoplasma Genitalium: Key information and resources - Canada.ca

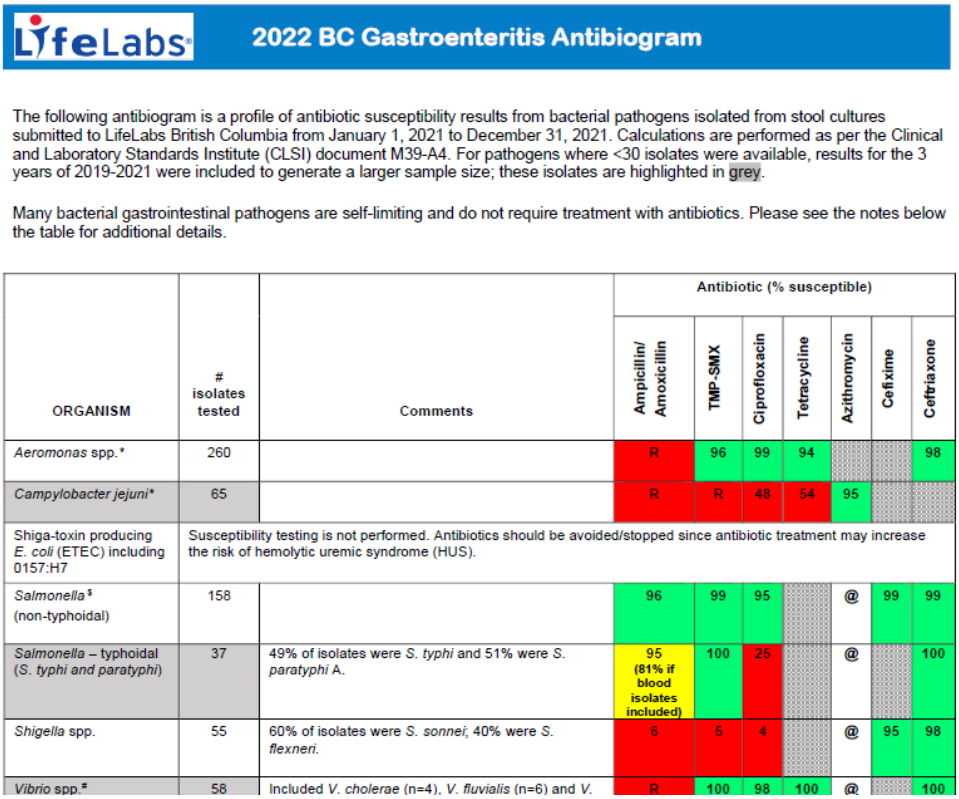
Check out our 2022 Antibiograms!

Dr. Diana Whellams, Medical Microbiologist, MD, FRCPC

To help you choose the right empiric antibiotic, consult our updated antibiograms, featuring data from 2021.

Unfortunately, due to the low volume of sputum samples submitted in 2021 (related to the COVID-19 pandemic), there were insufficient isolates to present data on respiratory tract pathogens. However, the antibiogram still contains susceptibility data for common skin/ soft tissue pathogens and urinary tract pathogens. Antibiograms are available for both the Lower Mainland and Vancouver Island regions.

Additionally, this year for the first time we've also generated an antibiogram for bacterial stool pathogens using province-wide data. While antibiotic therapy is not always required for treatment of gastroenteritis, we hope this will help healthcare providers choose appropriate antibiotics when treatment is necessary.



LifeLabs **2022 BC Gastroenteritis Antibiogram**

The following antibiogram is a profile of antibiotic susceptibility results from bacterial pathogens isolated from stool cultures submitted to LifeLabs British Columbia from January 1, 2021 to December 31, 2021. Calculations are performed as per the Clinical and Laboratory Standards Institute (CLSI) document M39-A4. For pathogens where <30 isolates were available, results for the 3 years of 2019-2021 were included to generate a larger sample size; these isolates are highlighted in grey.

Many bacterial gastrointestinal pathogens are self-limiting and do not require treatment with antibiotics. Please see the notes below the table for additional details.

ORGANISM	# isolates tested	Comments	Antibiotic (% susceptible)						
			Ampicillin/ Amoxicillin	TMP-SMX	Ciprofloxacin	Tetracycline	Azithromycin	Cefixime	Ceftriaxone
Aeromonas spp.*	260		R	96	99	94			98
*Campylobacter jejuni**	65		R	R	48	54	95		
Shiga-toxin producing *E. coli* (ETEC) including 0157:H7	Susceptibility testing is not performed. Antibiotics should be avoided/stopped since antibiotic treatment may increase the risk of hemolytic uremic syndrome (HUS).								
Salmonella § (non-typhoidal)	158		96	99	95		@	99	99
Salmonella – typhoidal (*S. typhi and paratyphi*)	37	49% of isolates were *S. typhi* and 51% were *S. paratyphi* A.	95 (81% if blood isolates included)	100	25		@		100
Shigella spp.	55	60% of isolates were *S. sonnei*; 40% were *S. flexneri*.	6	5	4		@	95	98
Vibrio spp.#	58	Included *V. cholerae* (n=4), *V. fluvialis* (n=6) and *V.*	R	100	98	100	@		100

All of our antibiograms can be found at [Antibiograms – LifeLabs]

Nasal cultures

Dr. Miguel Imperial, Medical Microbiologist, MD, FRCPC

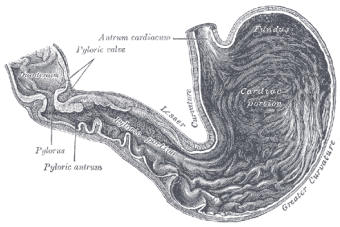
In the microbiology lab, we often receive "nose" or "nasal" swabs for bacterial culture. Unfortunately, it can be difficult to distinguish between requests for wound cultures from sites on the nose and methicillin-resistant *Staphylococcus aureus* (MRSA) or Group A streptococcal (GAS) surveillance screening (from nares).

In order to ensure the most complete assessment possible, as of May 30th, 2022, our microbiology lab will, by default, process nose and nasal samples as wound samples. Exceptions will include any sample where "surveillance", "carrier", "Staphylococcus", "MRSA", "screen", or "Streptococcus" is indicated on the requisition; these samples will be examined for *Staphylococcus aureus* (including MRSA) and Group A Streptococcus only.

If your patient requires MRSA or GAS screening, please include one of the terms above when ordering. However, rest assured that if you don't specify one of the above terms, *Staphylococcus aureus* and Group A Streptococcus will be routinely reported from wound cultures; you may just receive additional information about other organisms that are present as well.

Helicobacter pylori breath testing resumes at LifeLabs

Dr. Graham Segal, Clinical Pathologist, MD, ABP, CCFP



After a pause due to the COVID-19 pandemic, LifeLabs is pleased to resume offering *H. pylori* urea breath testing.

Health care providers are kindly reminded to ask patients not to eat, drink or smoke for the 4 hours preceding their testing. A handout with detailed patient instructions (available in multiple languages) can be provided to patients and is available at LifeLabs - Test Information Directory - HELICOBACTER PYLORI BREATH TEST: Lower Mainland

Certain medications may also interfere with test results; antibiotics should be discontinued 4 weeks prior to testing, bismuth-containing preparations (e.g. pepto-bismol) 2 weeks prior to testing, proton-pump inhibitors 1 week prior to testing, and H2 blockers or antacids should be stopped 24 hours prior to testing.

Updates to antibiotic susceptibility testing for bacterial stool pathogens

Dr. Diana Whellams, Medical Microbiologist, MD, FRCPC

As summer approaches, we typically see an increase in some of the bacterial pathogens associated with gastroenteritis. Our microbiology laboratory currently performs stool cultures for detection of *Aeromonas* spp., *Campylobacter jejuni* and *coli*, Shiga-toxin producing *E. coli* (including 0157:H7), Enteroinvasive *E. coli* (EIEC), *Salmonella* spp., *Shigella* spp, *Vibrio* spp., and *Yersinia enterocolitica* and *pseudotuberculosis*.

Infections with many of these organisms are typically self-limiting and do not usually require antibiotic treatment. Treatment may be warranted in those at risk of severe disease (e.g. immunocompromised patients, those at extremes of age or at risk of dehydration). Other situations where antibiotics are warranted include typhoid fever (caused by *S. typhi* or *paratyphi*) which should always be treated; infection with EIEC, *Shigella* spp., or *Vibrio cholerae*, which are typically more severe infections and usually warrant treatment; or infection with non-typhoidal *Salmonella* species in patients >50 or with endovascular grafts, who are at risk of endovascular disease.

LifeLabs has typically performed antibiotic susceptibility testing (AST) on a subset of these organisms, but as of June 27th, for the sake of antibiotic stewardship, we will be limiting routine AST to the following: typhoidal Salmonella (*S. typhi* and *paratyphi*), non-typhoidal *Salmonella* for patients <6 months old and >50 years old, EIEC, *Shigella* spp., and *V. cholerae*. For all other pathogens/situations, susceptibility testing will be available at the request of a healthcare provider for 7 days after the initial report is released. AST can be requested by calling our call centre at (604) 431-7206.

An additional resource for providers in cases of gastroenteritis is a newly-created antibiogram that shows susceptibility rates of bacterial stool pathogens isolated in British Columbia to commonly-used antibiotics and may help with empiric antibiotic selection. You can access the antibiogram at Mainland Antibiograms (azureedge.net)

Please contact Dr. Diana Whellams, Medical Microbiologist, at diana.whellams@lifelabs.com with any questions.

Genetics Rare Disease testing no longer performed at LifeLabs

Jim Hartley, Oncology, LifeLabs Genetics

As of May 2, 2022, LifeLabs Genetics is no longer offering genetic tests related to Rare Disease diagnosis. However, we continue to expand our genetic test offerings in other areas, such as reproductive health, wellness, oncology and risk assessment and testing, to support personalised treatments (Companion Diagnostics, Pharmacogenetics).

Test methodologies that are affected include Rare Disease genetic test queries and techniques, such as NGS, variant confirmation, repeat expansion, and MLPA, regardless of reimbursement mechanism.

As part of our transition, from now until the end of our offering of Rare Disease genetic testing, we will be sending all tests to our partner lab, Centogene Gmbh. As Centogene is out-of-country, healthcare providers who rely on Ministry funding will need to re-apply for funding for tests that were initially to be tested at our BC lab and select Centogene GmBH as the testing lab. Tests that were originally to be tested at Centogene and are funded will be processed as per usual. We will work closely with the British Columbia and Ontario Ministry of Health and healthcare providers to ensure minimal disruption and clarity in the funding re-application process.

The application form can be found at: http://www.bccss.org/clinical-services/bcaplm/health-professionals/out-of-province-out-of-country-funding

For future Rare Disease genetic testing, please consider the following:

- Our genetic counsellors can assist with finding testing options. Please contact them at 1-844-363-4357 ext. 42860 or genetic.counsellors@lifelabs.com
- Other genetic labs, such as Ambry, Blueprint Genetics, Centogene, GeneDx, Invitae, and Prevention Genetics

We apologize for any inconvenience, and we want to thank you for your continued trust and confidence in LifeLabs as your partner for genetics needs. Please visit LifeLabs Genetics website (https://www.lifelabsgenetics.com/) for more information.

Updated duration for INR standing orders with Mobile Lab Services

Dal Hundal, Manager, Mobile Lab Services

As per the Provincial BC Guidelines for Warfarin Therapy Management, LifeLabs' Mobile Lab Services team will provide INR services as follows:

Frequency	Service Duration
Daily	Maximum 5 days
Twice a week	Maximum 2 weeks
Weekly	Maximum 1 month
Bi-Weekly	Maximum 2 months
Monthly	Maximum 2 years
Bi-Monthly	Maximum 2 years

Source: https://www2.gov.bc.ca/gov/content/health/practitioner-professional-resources/bc-guidelines/warfarin-therapy

At the conclusion of the maximum service, please re-assess your patient to determine if additional Mobile Services are still required and submit a new Mobile Lab Services request, or provide the patient with a walk-in requisition before expiry. For INR patients that are not stable and require more frequent testing or a longer duration, please consult with a LifeLabs' Hematopathologist at (604) 431-7206.

Thank you for your support as we strive to reduce wait times for new patients requiring home collection and to allow additional time for repeat testing for out-of-range blood work for existing patients.

LifeLabs®

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Editor: Diana Whellams
Diana.whellams@lifelabs.com

Diagnostic Accreditation Program

Folate and RBC Folate Testing

Dr. William Schreiber, Medical Biochemist, MD, ABP

The BC Guideline for Folate Deficiency Investigation and Management (effective 2012) indicates that serum folate and red blood cell (RBC) folate tests are no longer being offered (except at Vancouver General Hospital and St. Paul's hospital under limited indications and require approval from the respective Medical Biochemist on call).

LifeLabs discontinued serum and RBC folate testing in 2012 to align with the updated guideline. In 2021, LifeLabs received over 2800 requests for folate testing, which were reported as "test not available". To provide more information about the availability of these tests and the approval process, the report comment has been updated. Effective June 19th, the following comment will appear on the report when Serum or RBC Folate are ordered:

"Serum folate and red blood cell folate tests are no longer available at LifeLabs. These tests are available at Vancouver General Hospital and St. Paul's Hospital only under limited indications. Please contact the respective Medical Biochemist on call at one of these facilities to obtain approval and arrange collection."

To obtain approval for Folate or RBC Folate testing, and to arrange for collection of the sample, please contact Vancouver General Hospital or St. Paul's Hospital at 1-877-747-2522 and request to speak to the Biochemist on call. Once approval for the test has been arranged with the Biochemist, direct your patient to the corresponding Hospital facility for specimen collection and testing.

Please see BC Guidelines Folate Deficiency- Investigation & Management (effective January 1, 2012) for more detailed information.

New Publication on Testing for Drugs of Abuse

Dr. William Schreiber, Medical Biochemist, MD, ABP

A book on drug testing written by Dr. William Schreiber, Clinical Director of Chemistry at LifeLabs, has just been published. *An Introduction to Testing for Drugs of Abuse* presents a distilled set of facts about the major drugs of abuse that are encountered in clinical practice. Special attention is given to the testing process, with an emphasis on interpretation of test results. Case studies at the end of each chapter illustrate the many situations in which drug testing is performed for medical, legal and employment purposes.

This book provides practical guidance to doctors, nurses, pharmacists and other health care professionals on how to order and interpret drug tests accurately. It is available at the following website: https://www.wiley.com/en-ca/An+Introduction+to+Testing+for+Drugs+of+Abuse-p-9781119794059

You can contact Dr. Schreiber with questions and comments about the book at william.schreiber@lifelabs.com.