LifeLabs®

Health Care Providers Newsletter
June 2021

Select Patient Service Centres Transitioning to Appointment Centres

Brenda Lo, Client Services Manager

As of April 26, LifeLabs is converting select locations to Appointment Centres to improve the patient experience. The benefits of Appointment Centres include:

- Shorter wait times – The majority of customers are seen within 10 minutes
- Greater availability of appointments – The number of appointments slots is more than doubled
- Decreased time to book an appointment
- Improved safety – Appointment centres enable better social distancing

What this means for your patients:

- Patients will be required to book appointments at these locations. Available appointment slots have been significantly increased to accommodate this.
- Walk-in patients will not be turned away; instead they will be given an appointment later that day.
- Patients who are elderly, vulnerable, or immunocompromised requiring urgent tests will be accommodated when they arrive.
- Please note—appointments may still require 10-30 min waits depending on volumes. If the facility has reached its max capacity for the day, we will offer the patient the option to complete their test at a nearby location or we will ask them to book an appointment for another day.
- Save My Spot is not available at Appointment Centre locations.
- Other LifeLabs Patient Service Centres (PSCs) in your area will continue to serve walk-in patients.

Please encourage your patients to book appointments:

- Patients can book online by visiting LifeLabs.com or calling 1-800-431-7206.
- If you anticipate a patient will require bloodwork, please ask them to book an appointment at the lab ahead of their medical appointment to ensure test results are processed and reported back to you in a timely manner.
- Please advise patients unfamiliar with our online appointment booking system that they can request a family member to book an appointment on their behalf.
- To identify a LifeLabs Appointment Centre, please visit https://locations.lifelabs.com/locationfinder.

Sending requisitions:

Requisitions can be faxed to us at: 1-888-674-0370. PDF requisitions can also be emailed to PatientREQSBC@lifelabs.com. Please send only one requisition per email and use the patient's legal first and last name as the subject (i.e. Jane Doe). Patients can then get their sample collected at any LifeLabs PSC. Note: The security of patient requisitions sent through an email domain is the physician's responsibility. LifeLabs is responsible for the security of requisitions after we have received them via email or fax.

COVID-19 Antibody Testing

William Schreiber, Medical Biochemist, MD, FRCPC

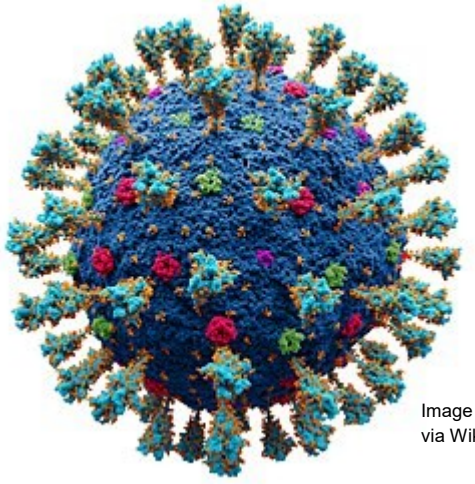


Image credit: Alexey Solodovnikov via Wikimedia commons

LifeLabs offers testing for antibodies to SARS-CoV-2 to assess recent or previous infection with the virus. Antibodies develop in most patients within 2-3 weeks of infection. Here is a brief summary of what the test is and how to interpret the results.

The test is a qualitative immunoassay that detects antibodies to the nucleocapsid (N) antigen of the SARS-CoV-2 virus. The assay measures total antibody (IgG, IgM, and IgA). Results are reported as "reactive" (positive for antibodies) or "Non-reactive" (negative for antibodies). The test has a high sensitivity (96%) and specificity (>99%) for previous infection when blood samples are collected 3 weeks or more after symptoms develop.

A negative result usually means that the patient has not been infected with SARS-CoV-2. It could also indicate that the patient (1) did not produce antibodies in response to infection (2) is in the window period between infection and production of antibodies, or (3) was infected many months ago and antibodies are no longer detectable. People who are immunosuppressed or have mild disease may not produce measurable levels of antibody.

A positive result indicates the patient has been infected with SARS-CoV-2. In rare cases (0.1-0.2%), the test may be positive due to cross-reactivity with other viruses.

With increasing rates of vaccination in the community, many people want to know if they have developed antibodies after receiving the vaccine. These vaccines generate antibodies to the spike (S) protein, which is on the surface of the virus. **Our test for antibodies to the N protein can not detect antibodies produced by vaccination.**

The COVID-19 antibody test is not covered by MSP – the cost to the patient is $75. Antibody testing must be ordered by a healthcare provider. Order "COVID-19 antibodies" in the Other Tests section of the LifeLabs standard laboratory requisition. Patients can also pre-pay for the test online at LifeLabs.com and receive a requisition pre-filled with their details by e-mail. This requisition must be signed by the health care provider before blood can be collected. Results will be available within 1-2 days.

More information for patients and health care providers is available at

https://www.lifelabs.com/test/covid19-antibody/#tab-2

Clarification on Blood Typing and Antibody Screening

Peter Van Den Elzen, Hematologist, MD, FRCPC

Currently, LifeLabs performs blood typing for ABO and Rh blood groups. This is to be distinguished from the often-ordered "Type and Screen" which is usually only ordered in pregnancy or in the transfusion or pre-transfusion setting at a hospital.

Blood typing includes testing for ABO and Rh blood groups. ABO testing measures the presence/absence of ABO antigens on a patient's red blood cells. Potential results include A antigen only (A) B only (B), both A and B (AB) and none of these antigens (O). In addition, we routinely perform "reverse typing" which detects anti-ABO antibodies in the patient's serum (which occur naturally). Blood type A people have anti-B antibodies, blood type B has anti-A antibodies, blood type AB has no ABO antibodies and blood type O has both anti-A and anti-B. Blood type O is the "universal donor". For Rh typing, we determine whether someone is Rh+ or Rh- (ie has the D antigen on his/her blood cells) and do not test for antibodies against the Rh blood group system. All of this testing is performed in-house at LifeLabs.

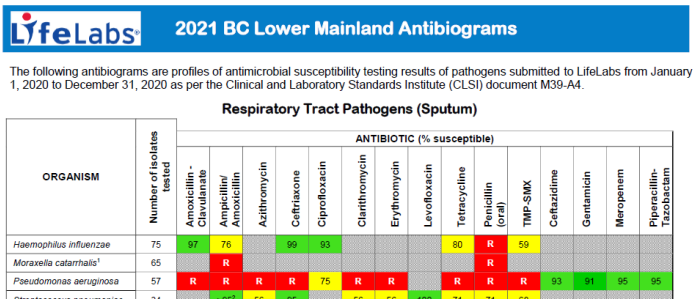
Antibody screens (included in the "type and screen") involves testing for antibodies against a panel of potentially clinically significant antibodies (Rh, Kell, Duffy etc.). This is NOT performed at LifeLabs in our routine blood typing test. Antibody screens are usually only required in the setting of pregnancy or transfusion. It can be specifically ordered as an antibody screen which will be sent to Canadian Blood Services for testing.

In summary, for blood typing to look for A, B, or O and Rh, order "Blood typing," and the testing will be performed at LifeLabs. To check for ABO and Rh status in a pregnant woman or pre-transfusion, order "Blood Type and Antibody Screen" and the relevant testing will be done (at both LifeLabs and Canadian Blood Services).

2020 Antibiograms Now Available

Diana Whellams, Medical Microbiologist, MD, FRCPC

This year's antibiograms—one for the lower mainland and one for Vancouver Island—are now available. To help guide your antibiotic prescribing, data are from 2020 are compiled to show susceptibility rates for common bacteria isolated from urine, sputum, and skin/soft tissue.


LifeLabs 2021 BC Lower Mainland Antibiograms

The following antibiograms are profiles of antimicrobial susceptibility testing results of pathogens submitted to LifeLabs from January 1, 2020 to December 31, 2020 as per the Clinical and Laboratory Standards Institute (CLSI) document M39-A4.

Respiratory Tract Pathogens (Sputum)

ORGANISM	Number of isolates tested	ANTIBIOTIC (% susceptible)														
		Amoxicillin - Clavulanate	Ampicillin/ Amoxicillin	Azithromycin	Ceftriaxone	Ciprofloxacin	Clarithromycin	Erythromycin	Levofloxacin	Tetracycline	Penicillin (oral)	TMP-SMX	Ceftazidime	Gentamicin	Meropenem	Piperacillin-Tazobactam
Haemophilus influenzae	75	97	76		99	93				80	R	59				
Moraxella catarrhalis[1]	65		R								R					
Pseudomonas aeruginosa	57	R	R	R	R	75	R	R		R	R	R	93	91	95	95

Find the antibiograms here:

https://www.lifelabs.com/healthcare-providers/reports/antibiograms/?myProvince=on

LifeLabs®
www.lifelabs.com/contact-us
Telephone: 604-431-7206
Toll free: 1-800-431-7206

Editor: Diana Whellams
Diana.whellams@lifelabs.com

Biotin Interference Update

Cheryl Tomalty, Clinical Biochemist, PhD, FCACB

Due to the recognition that high dose Biotin supplementation (e.g. 5,000 ug per day) can cause erroneous results for some laboratory tests, manufacturers have been reformulating the immunoassays that use biotin-streptavidin linkages in order to reduce the effect of Biotin. LifeLabs is happy to announce that 3 assays previously affected—**cardiac Troponin T, Hepatitis B surface Antigen (HBsAg), and anti-HBs**—now have increased biotin tolerance and are not affected by high doses of Biotin. (The normal intake of Biotin as part of a daily multivitamin (30 to 60 ug) has never affected the assays.)

The table below has been updated to include following tests performed at LifeLabs that are not affected or affected by mega doses of biotin. A comment will be added to the patient report for assays that have been reformulated. Updates to the Biotin Interference will be made as manufacturers continue to reformulate the affected assays.

Test	Effect of high dose biotin on test result
cTroponin T	**Not affected**
HBsAg	**Not affected**
Anti-HBs	**Not affected**
βHCG	↓
ACTH	↓
AFP	↓
AMH	↓
Anti-CCP	↓
Anti-HAV-IgM	↓
Anti-HBc-Total	↓
Anti-HBs	↓
Anti-HBe	↓
Anti-HCV	↓
Anti-Thyroglobulin	↓

Test	Effect of high dose biotin on test result
Anti-TPO (Thyroperoxidase)	↓
CA-125	↓
CA 15-3	↓
CA 19-9	↓
DHEAS	↑
HBeAg	↓
HGH	↓
Insulin	↓
PTH	↓
SHBG	↓
Testosterone	↑
Thyroglobulin	↓
CTX (Crosslaps)	↓

Laboratory Test Results Turn Around Time (TAT)

Kim Alves, Quality and Regulatory Affairs

Image credit: Islander61 via Wikimedia commons

LifeLabs is committed to the confidential and timely release of accurate test results consistent with the requirements of our patients, Health Care Providers (HCP) and Public Health. Below is information about expected turnaround times for a range of laboratory tests that we perform.

Routine Test Requests

Chemistry, coagulation, hematology, and urinalysis routine tests generally have turnaround times of 24 hours after receipt in the laboratory.

Routine microbiology and parasitology tests generally have turnaround times of 72 hours after receipt in the laboratory.

Esoteric or low-volume tests may be processed in 'batches' through the week and will have longer turnaround times. Call LifeLabs Customer Information Centre at 1-800-431-7206 for more information.

Routine test results are communicated to the HCP via web-based Excelleris, hard-copy or fax depending on the HCP's pre-selected method of resulting.

If there is a critical test result, the HCP will be phoned to communicate the critical result.

STAT (Urgent) Requests

LifeLabs provides—to the extent practicable—prioritized preferential service to specimens designated by the ordering HCP as being STAT (urgent) in nature.

Chemistry and hematology test results will be reported and phoned to the HCP within 6 hours of receipt at the laboratory. Microbiology specimens will have preliminary results available within 24 hours.

Not all tests are available as a STAT request; phone the Customer Information Centre at 1-800-431-7206 for more details.

Unexpected Delays in Result Reporting

LifeLabs is committed to timely reporting but occasionally the laboratory may experience difficulties that affect its ability to provide results within the stated timeframes; e.g., weather disruptions, equipment down–time.

This information is also available at www.lifelabs.com:

https://lifelabs.azureedge.net/lifelabs-wp-cdn/2021/04/Laboratory-Tests-Results-Turnaround-Times-British-Columbia-1.pdf