

### LifeLabs Healthcare Providers' Conference

**09:00—17:00, Saturday, October 14, 2017**

**Fairmont Waterfront Hotel**

**900 Canada Place Way, downtown Vancouver**

LifeLabs invites physicians, nurses and other healthcare practitioners to an intensive one day conference to better interface clinical practice with Lab Medicine. Through case-based examples and literature reviews, local experts will cover the following topics:

- Phone a Friend—The Interface between Laboratory Medicine and Clinical Practice – cases from everyday practice.
- Choosing Wisely – Using diagnostic tests appropriately.
- Toxicology—Urine drug testing in substance use disorders.
- Haematology Potpourri – NOACs, coagulation monitoring and common cases.
- What's new in infectious diseases diagnosis—New viruses, STIs, and syndromic testing.

- The need for clinical pathology consultation in primary care.
- Electronic ordering and evidence-based decision support.
- Should I have this genomics test? Four questions to ask.
- What would you do? A panel discussion of diagnostic dilemmas.

Our goal is to bridge the gap between clinical and laboratory medicine. Often seen as a “black box,” we aim to demystify the laboratory and to establish better access to laboratory medicine expertise. We will use case studies to provide practical clinical pearls for health care providers (particularly those providing primary care, such as GPs and NPs) and we will also explore how evolving laboratory medicine practice will improve the quality of clinical care for all our patients.

To learn more or register, please visit our website or contact the event coordinator at [annualconference@lifelabs.com](mailto:annualconference@lifelabs.com).

### Healthcare Practitioners' Survey

Every year, LifeLabs asks you how we can provide you with a better experience. The input you provide—along with feedback from hundreds of your peers—has helped us make improvements and investments that matter to you. With the LifeLabs' 2017 Health Care Provider Satisfaction survey now open, we encourage you to once again tell us what we are doing well, where we can improve, how we can innovate to continue delivering high-quality laboratory services, and what educational needs you may have that we can support. The short survey should take you about 5 minutes to complete and up to 10 minutes if you wish to continue with the long survey. To take the survey, please visit [www.lifelabs.com/HCPsurvey](http://www.lifelabs.com/HCPsurvey)

*Andrew Don-Wauchope, MD FRCPC, VP Clinical Services*

Everyone who completes the short survey will be entered into a draw for the grand prize of \$1000 and 8 secondary prizes of \$500. Those who complete the long survey may receive additional cash rewards.

Survey closes October 23; see contest rules and regulations for more information.



### Foundations For Our Future

We are pleased to share with you *Foundations For Our Future*, LifeLabs' 2016 Report to Our Community. This Report shares stories that are meant to be celebrated as well as the impact LifeLabs is making in the lives of Canadians.

In this Report, you'll learn more about our employees as well as stories about our commitment to excellence, innovation and building strong communities.

Find the report online at: [www.lifelabs.com/community-report](http://www.lifelabs.com/community-report)

# Pitfalls of Cortisol Testing in the Outpatient Setting

Dave Shu, MD FRCPC  
Regional Division Head of Endocrinology, FHA

## Adrenal insufficiency

The question of adrenal insufficiency has come up more frequently since the advent of “adrenal fatigue”. For many of these patients, it is important to rule out adrenal insufficiency as a diagnosis. Adrenal insufficiency should be suspected in patients who have unexplained anorexia, fatigue, weight loss or hyponatremia.

Adrenal insufficiency can be caused by an adrenal problem (primary) or ACTH deficiency (secondary). Symptoms of primary adrenal insufficiency are generally more pronounced. Hyperpigmentation, salt cravings, weight loss, are usually only seen in primary adrenal insufficiency. Secondary adrenal insufficiency is often due to iatrogenic exogenous steroids, high-dose opioids, pituitary surgery, or radiation.

An AM Cortisol is the initial test of choice for the screening of adrenal insufficiency. Cortisol levels higher than 400 nmol/L rule out adrenal insufficiency. Cortisol levels under 80 nmol/L are highly suspicious for adrenal insufficiency.

## Cushing’s syndrome

Cushing’s syndrome is caused by exposure to excess cortisol through iatrogenic administration, ACTH excess or primary adrenal overproduction. Symptoms and signs such as weight gain, features of metabolic syndrome and mood disorders are present in many patients

with Cushing’s syndrome but are not specific for the condition. The presence of easy bruising, cutaneous atrophy and proximal muscle weakness in the appropriate setting should prompt further investigation.

The dexamethasone suppression test is the preferred screening test for Cushing’s syndrome. The test is performed by giving 1mg of dexamethasone at 11pm with an AM Cortisol drawn the next morning within 3 hours of waking. Please instruct patients to notify the lab staff when they arrive for a time-sensitive test to ensure a timely collection. A cortisol level of less than 50 nmol/L effectively rules out Cushing’s. It is important to write dexamethasone suppression test on the lab requisition to ensure the low cortisol results are not misinterpreted as adrenal insufficiency. PM Cortisol testing is no longer considered a useful test for Cushing’s.

## Caveats of cortisol testing

Testing cortisol has a number of caveats. Cortisol has diurnal variation. The lab assay normal range is based on an AM sample. Patients who have abnormal sleep-wake patterns (e.g. shift workers) may have falsely low morning cortisol. Oral contraceptive pills increase cortisol binding globulin which will elevate total cortisol levels. Inhaled steroids, cortisone injections, high-potency steroid creams can also affect results. Caution is advised in ordering and interpreting cortisol values in these populations.

---

## LifeLabs at GoodLife Pacific Autism Family Centre

LifeLabs is thrilled to announce that employees at all LifeLabs patient service centres (PSC) across Ontario and B.C. are fully trained in the Serving Customers with Autism (SCA) program, the first program of its kind in Canada. In addition to this nation-wide training, the PSC within the GoodLife Pacific Autism Family Centre in Richmond, B.C., is now open and accepting patients. This unique PSC design, along with the SCA program protocols, will contribute significantly to a positive health care experience for patients with Autism Spectrum Disorder (ASD) and related disorders.

It is estimated that 1 in 68 children are currently diagnosed with ASD and that ASD is the fastest growing and most commonly diagnosed neurological disorder in Canada. For people with ASD, having a medical procedure such as blood collection can be a traumatic experi-

ence. This can result in a delayed collection and a possible delay in treatment decisions. In extreme cases, patients may even require sedation which results in even longer delays and brings additional risks to the patient, and cost to the health care system. Researched and designed by LifeLabs and the Holland-Bloorview Kids Rehabilitation Hospital in Toronto, as well as research from around the globe and the Pacific Autism Family Network, the SCA program provides LifeLabs’ staff with appropriate skills and essential tools like soothing light options, the ability to play videos, and the use of many other calming tools and techniques to make for a stress-free, tailored visit at all LifeLabs PSCs.

For more information please visit [lifelabs.com/autismprogram](http://lifelabs.com/autismprogram)