

Choosing Wisely Canada Labs Recommendations

Specialty	Societies	Recommendation
Allergy & Clinical Immunology	Canadian Society of Allergy and Clinical Immunology	Don't order specific IgG testing to panels of foods.
		Don't order specific immunoglobulin E (IgE) tests (skin or serum) unless indicated by the patient's history specific to that food.
Anesthesiology	Canadian Anesthesiologists' Society	Don't order baseline laboratory studies (complete blood count, coagulation testing, or serum biochemistry) for asymptomatic patients undergoing low-risk non-cardiac surgery.
Burns	Burns Canada	Do not routinely swab open wounds and do not prescribe systematic antibiotics based on these results, without clinical features of local or systemic infection.
		Do not perform routine investigations such as daily blood tests or chest radiographs unless they will guide decision making with respect to management of the patient with burns.
Clinical Chemistry	Canadian Society of Clinical Chemists	Don't order HFE-related hemochromatosis molecular testing unless BOTH the ferritin (above upper limit of normal), and the transferrin saturation (above 45%) are elevated.
		Don't repeat HbA1c testing within 3 months of a previous result.
		Don't order tissue transglutaminase IgG antibody or Deamidated Gliadin Peptide (DGP) antibody testing in the initial screening for Celiac Disease.

Don't repeat renal calculi analysis within 3 years.

Don't order random urine protein electrophoresis to screen for a monoclonal gammopathy.

Do not routinely order iron profile (iron, UIBC/TIBC, transferrin saturation) in the investigation of iron deficiency. A low ferritin result is highly probable for iron deficiency, and thus, there is no added value in performing an iron profile.

Do not order AST or Urea for routine screening in the initial workup of common diagnostic investigations. Review order sets regularly for diagnostic utility and uncouple low value routine tests (i.e. AST and ALT).

Do not routinely order both total and direct bilirubin testing on patients.

Do not routinely order urine drug screens for evaluation of patients with substance use disorders (1) without a clinical care plan directed by the test results, (2) without laboratory input, especially on the ability of immunoassay results to support the clinical management.

Don't order allergen specific IgE (sIgE) tests unless indicated by the patient's clinical history and correlated to specific exposures.

	Canadian Critical Care Society	
Critical Care	Canadian Association of Critical Care Nurses	Don't order routine investigations including chest radiographs or blood tests in critically ill patients, except to answer a specific clinical question.
	Canadian Society of Respiratory Therapists	
Endocrinology and Metabolism	Canadian Society of Endocrinology and Metabolism	Don't use Free T4 or T3 to screen for hypothyroidism or to monitor and adjust levothyroxine (T4) dose in patients with known primary hypothyroidism, unless the patient has suspected or known pituitary or hypothalamic disease.
		Don't routinely test for Anti-Thyroid Peroxidase Antibodies (anti – TPO).
Family Medicine		Don't do annual screening blood tests unless directly indicated by the risk profile of the patient.
	College of Family Physicians of Canada	Don't routinely measure Vitamin D in low risk adults.
		Don't order thyroid function tests in asymptomatic patients.
Fertility and Andrology	Canadian Fertility and Andrology Society	Don't routinely perform preimplantation genetic testing for aneuploidy screening on patients undergoing IVF.
		Don't routinely perform sperm DNA fragmentation testing.

General Surgery	Canadian Association of General Surgeons	Routine preoperative chest x-rays and baseline laboratory studies, such as complete blood count, metabolic panel, or coagulation studies, should not be obtained in patients undergoing low-risk surgery with no significant systemic disease (ASA I or II) and the absence of symptoms.
Hematology	Canadian Hematology Society	<p>Don't order thrombophilia testing in women with early pregnancy loss.</p> <p>Don't request a fine-needle aspirate for the valuation of suspected lymphoma</p>
Hepatology	Canadian Association for the Study of Liver Disease	<p>Don't order serum ammonia to diagnose or manage hepatic encephalopathy (HE).</p> <p>Don't order HFE genotyping based on serum ferritin values alone to diagnose hereditary hemochromatosis.</p> <p>Don't repeat hepatitis C viral load testing in an individual who has established chronic infection, outside of antiviral treatment.</p>
Infectious Disease	Association of Medical Microbiology and Infectious Disease Canada	<p>Don't routinely collect or process specimens for Clostridium difficile testing in infants less than one year of age with diarrhea.</p> <p>Don't routinely repeat CD4 measurements in patients with HIV infection with HIV-1 RNA suppression for >2 years and CD4 counts >500/μL, unless virologic failure occurs or intercurrent opportunistic infection develops.</p>

Internal Medicine	Canadian Society of Internal Medicine	In the inpatient setting, don't order repeated CBC and chemistry testing in the face of clinical and lab stability.
		Don't routinely perform preoperative testing (such as chest X-rays, echocardiograms, or cardiac stress tests) for patients undergoing low risk surgeries.
		Don't do a workup for clotting disorders (hypercoagulability testing) for patients who develop first episode of DVT in the setting of a known precipitant.
Long Term Care	Canadian Society for Long Term Care Medicine	Don't do a urine dip or urine culture unless there are clear signs and symptoms of a urinary tract infection (UTI).
		Don't order screening or routine chronic disease testing just because a blood draw is being done.

**Medical
Biochemistry**

Canadian Association
of Medical
Biochemists

Don't order serum folate testing in the absence of the following: anemia with red blood cell macrocytes or hypersegmented polynuclear neutrophils and a reasonable clinical suspicion of a nutritional deficiency such as an unsupplemented restrictive diet, severe Alcohol Use Disorder, or malabsorption.

Don't order an erythrocyte sedimentation rate (ESR) to screen asymptomatic patients or as a general test to look for inflammation in patients with undiagnosed conditions.

Don't order amylase in addition to lipase to detect pancreatitis.

Don't request a serum protein electrophoresis in asymptomatic patients in the absence of otherwise unexplained hypercalcemia, renal insufficiency, anemia or lytic bone lesions.

Don't request uric acid as part of the routine evaluation of cardiovascular risk, obesity or diabetes.

Medical Genetics	Canadian College of Medical Geneticists	<p>Don't use non-invasive prenatal detection of fetal aneuploidies by cell-free DNA as a diagnostic test.</p>
		<p>Don't order a chromosome analysis by doing a karyotype for individuals with intellectual disability/developmental delay of unknown etiology.</p>
		<p>Don't order whole exome sequencing prior to genetic counselling.</p>
		<p>Don't order carrier testing in children.</p>
Medical Laboratory Science	Canadian Society for Medical Laboratory Science	<p>Don't collect more blood than what is needed. Use short draw tubes, consider add-on testing, and reduce or combine duplicate orders.</p>
		<p>Don't collect extra blood tubes in anticipation of test orders.</p>
		<p>Don't support repeat test ordering (re-testing) at a frequency that is not backed by evidence.</p>
		<p>Don't routinely repeat critical results for most common analytes before reporting.</p>
		<p>Don't support ordering system mechanisms that contribute to over-testing. Encourage the development of an evidence-based utilization management program that may include interventions such as unbundling order sets, reflex testing algorithms, and decision-support technology.</p>
		<p>Don't allow standing orders for repeat testing without a stop or review date.</p>

Medical Microbiology	Association of Medical Microbiology and Infectious Disease Canada	Don't routinely collect or process specimens for Clostridium difficile testing in infants less than one year of age with diarrhea.
		Don't collect urine specimens for culture from adults who lack symptoms localizing to the urinary tract or fever unless they are pregnant or undergoing genitourinary instrumentation where mucosal bleeding is expected.
		Don't routinely collect or process specimens for Clostridium difficile testing when stool is non-liquid (i.e., does not take the shape of the specimen container) or when the patient has had a prior nucleic acid amplification test result within the past 7 days.
		Don't obtain swabs from superficial ulcers for culture as they are prone to both false positive and false negative results with respect to the cause of the infection.
		Don't routinely order nucleic acid amplification testing on cerebrospinal fluid (e.g., herpes simplex virus, varicella zoster virus, enteroviruses) in patients without a compatible clinical syndrome.
		Don't routinely obtain swabs during surgical procedures when fluid and/or tissue samples can be collected.

		Don't suggest a test, treatment, or procedure that will not change the patient's clinical course.
Medical Students	Canadian Federation of Medical Students	Don't suggest ordering tests or performing procedures for the sole purpose of gaining personal clinical experience.
		Don't suggest ordering tests or treatments pre-emptively for the sole purpose of anticipating what your supervisor would want.
Nurse Practitioner	Nurse Practitioner Association of Canada	Don't routinely measure vitamin D in low risk adults Don't order thyroid function tests as screening for asymptomatic, low risk patients
Nursing	Canadian Nurses Association Infection Prevention and Control Canada	Don't do a urine dip or send urine specimens for culture unless urinary tract symptoms are present. Don't send unnecessary or improperly collected specimens for testing. Don't collect stool that is not diarrhea for Clostridioides difficile infection testing or test of cure.

Obstetrics	Society of Obstetricians and Gynaecologists of Canada	<p>Don't perform routine urinalysis (protein, glucose) at every antenatal visit (in low risk normotensive women)</p> <p>Don't routinely order hormone levels including estradiol, progesterone, follicle-stimulating hormone and luteinizing hormone in postmenopausal women or after a hysterectomy, either to diagnose menopause or to manage hormone therapy</p>
Occupational Medicine	Occupational Medicine Specialists of Canada	<p>Don't order blood mercury levels unless: dietary history suggests risk, the patient is pregnancy or planning to become pregnancy, and/or the patient is occupationally exposed to organomercury compounds</p> <p>Do not use a test-based requirement for return to work clearance following COVID-19 when time-based strategies are appropriate</p>
Oncology	<p>Canadian Association of Medical Oncologists,</p> <p>Canadian Association of Radiation Oncology</p> <p>Canadian Partnership Against Cancer</p> <p>Canadian Society for Surgical Oncology</p>	<p>Don't order tests to detect recurrent cancer in asymptomatic patients if there is not a realistic expectation that early detection of recurrence can improve survival or quality of life</p>

Orthopaedics	Canadian Orthopaedic Association	Don't routinely request pathological examination of tissue from uncomplicated primary hip and knee replacement surgery undertaken for degenerative arthritis
	Canadian Arthroplasty Society	
	Arthroscopy Association of Canada	
Otolaryngology	Canadian Society of Otolaryngology - Head & Neck Surgery	Don't swab the nasal cavity as part of the work up for rhinosinusitis
	Rhinology Subspecialty Group	Don't perform computed tomography or blood work in the evaluation of a patient with sudden sensorineural hearing loss (SSNHL) given its presumed viral etiology.
Paediatric Surgery	Canadian Association of Paediatric Surgeons	Don't order C-reactive protein (CRP) in children with suspected appendicitis
		Don't delay testing for total and conjugated (direct) bilirubin in any newborn with persistent jaundice beyond 2 weeks of age.
Paediatrics	Canadian Paediatric Society	Don't perform screening panels (IgE tests) for food allergies without previous consideration of the pertinent medical history
		Don't routinely do a throat swab when children present with a sore throat if they have a cough, rhinitis, or hoarseness as they almost certainly have viral pharyngitis

		Don't perform population based screening for 25-OH-Vitamin D deficiency
		Avoid routine preoperative laboratory testing for low risk surgeries without a clinical indication
Pathology	Canadian Association of Pathologists	Avoid standing orders for repeat complete blood count (CBC) on inpatients who are clinically/laboratorily stable
		Don't send urine samples for culture on asymptomatic patients including the elderly, diabetics, or as a follow up to confirm effective treatment
Psychiatry	Canadian Academy of Child and Adolescent Psychiatry Canadian Academy of Geriatric Psychiatry Canadian Psychiatric Association	Don't routinely order qualitative toxicology testing (urine drug screen) on all psychiatric patients presenting to the emergency room.
Public Health	Public Health Physicians of Canada	Don't routinely do serologic testing post-immunization (e.g. Hep B and Measles) Don't do unnecessary screening tuberculin skin tests

Residents	Resident Doctors of Canada	Don't order investigations that will not change your patient's management plan
		Don't order repeat laboratory investigations on inpatients who are clinically stable
		Don't order non-urgent investigation or procedures that will delay discharge of hospital in-patients
		Don't order invasive studies if less invasive options are available and effective
Rheumatology	Canadian Rheumatology Association	Don't order ANA as a screening test in patients without specific signs or symptoms of systemic lupus erythematosus (SLE) or another connective tissue disease (CTD).
		Don't order an HLA-B27 unless spondyloarthritis is suspected based on specific signs or symptoms.
Rural Medicine	Society of Rural Physicians of Canada	Don't call in staff for an investigation (i.e. blood test, imaging, operative procedures, etc.) at off-service hours unless it is likely to change management.
Transfusion Medicine	Canadian Obstetrical and Pediatric Transfusion Network	Do not routinely perform a group and screen test at the time of delivery unless there is no prior test during the current pregnancy and/or the risk of maternal hemorrhage or transfusion is high.
	Canadian Society for Transfusion Medicine	Do not perform serological weak D testing on antenatal samples with weak or variable RhD typing results.
		Do not repeat prenatal titrations for mothers with clinically significant antibodies (e.g. RhD, K) if prediction of fetal cognate antigen typing is feasible and is deemed to be negative.

Avoid routinely performing direct antiglobulin test on all neonatal cord samples.

Don't order unnecessary pre-transfusion testing (type and screen) for all pre-operative patients.

Don't routinely order perioperative autologous and directed blood collection.

Urology	Canadian Urological Association	Don't order serum testosterone in men without symptoms of hypogonadism.
Cardiology	Canadian Cardiovascular Society	Don't test for myoglobin or CK-MB in the diagnosis of acute myocardial infarction (AMI). Instead, use troponin I or T.
