

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Salicylate, Serum Salicylic Acid ASA	Core UH & VH	4.5 mL Green (Lithium Heparin) top Vacutainer tube Pediatric: 0-2 yrs: Green 0.5pk. 2-10 yrs: 2 mL Green top GENERAL LABORATORY REQUISITION	As required	Analgesic/Antipyretic: 0.2-0.7 mmol/L Antiinflammatory: 1.1-2.2 mmol/L Toxic: >2.3 mmol/L	2008-11-15	
Salicylic Acid (see <u>Salicylate, Serum</u>)						
Salivary Cortisol (see <u>Cortisol, Saliva</u>)						
Salivary Gland (see <u>Image-Guided Fine Needle Aspirate Cytology, Non-Image Guided Fine Needle Aspiration Biopsy for Cytology</u>)						
Salmonella Culture (see <u>Faeces Culture</u>)						
Sandhoff Disease (see <u>Beta-N-Acetylhexosaminidase %A, A, A+B, Leukocyte/Plasma/Fibroblasts</u>)						
Sanfilippo A Syndrome (see <u>Heparin Sulfamidase, Fibroblasts</u>)						
Sanfilippo B Syndrome (see <u>Alpha-N-Acetylglucosaminidase, Plasma</u>)						
Sanfilippo C Syndrome (see <u>AcCoA: Alpha-Glucosamine Acetyltransferase, Fibroblasts</u>)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Sarcoptes scabiei	Microbiology (VH)	Skin scrapings PUBLIC HEALTH LABORATORY TEST REQUISITION	Daily The specimen will be referred out Monday - Friday to the Public Health Lab.	See report	2007-02-27	
Scheie Syndrome (see <u>Alpha-Iduronidase, Leukocyte/Plasma/Fibroblasts</u>)						
Schindler Disease (see <u>Alpha-N-Acetylgalactosaminidase, Leukocyte/Plasma/Fibroblasts</u>)						
Schistosoma (see <u>Ova and Parasites-Blood and Tissue</u>)						
Schistosomiasis Serology	Microbiology (VH)	Blood-5 mL Gold or 6 mL Red top Vacutainer PUBLIC HEALTH LABORATORY TEST REQUISITION	Daily		2010-09-28	Adequate clinical and epidemiological information must accompany specimen. Clearly indicate on label and requisition "SCHISTOSOMIASIS SEROLOGY". Must be ordered by the Lab.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Screen for Factor V Leiden Mutation FVL	Molecular Diagnostics	4 mL Lavender (EDTA) top Vacutainer tubes Pediatric 0-2 years: Contact Lab at Ext. 58140 for number of tubes required prior to sampling GENERAL LABORATORY REQUISITION	Bi-weekly	Negative	2006-06-01	
Screen for O & P (see <u>Ova and Parasites</u>)						
Se (see <u>Selenium, Whole Blood</u>)						
Sed Rate (see <u>Erythrocyte Sedimentation Rate</u>)						
Sedimentation Rate (see <u>Erythrocyte Sedimentation Rate</u>)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Selenium, Erythrocytes	Trace Elements	Reference number 368381 - HMMS# 11073 - 6mL K2-EDTA Royal Blue Vacutainer tube TRACE ELEMENTS REQUISITION	Batched analysis	SI Units (Reported on Patient Chart): 2.9-4.6 µmol/L Conventional Units: 227-365 µg/L		Reference Ranges are based on Non- Occupationally exposed population. Find Interpretive Comment and Clinical Information here:

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Selenium,Plasma	Trace Elements	Reference number 368381 - HMMS# 11073 - 6mL K2-EDTA Royal Blue Vacutainer tube TRACE ELEMENTS REQUISITION	Batched analysis	SI Units (Reported on Patient Chart): 0-12 months:0.72 - 1.21 µmol/L 1-5 years:1.22-1.82 µmol/L 6- 9 years:1.28-2.04 µmol/L ≥10 years:1.33-2.03 µmol/L Conventional Units: 0-12 months:56.9-95.6 µg/L 1- 5 years:96.4-143.8 µg/L 6-9 years:100.8-161.4 µg/L ≥10 years:105.3-160.4 µg/L Concentration of Selenium is much hi (more...)	2010-02-01	Reference Ranges are based on Non-Occupationally exposed population. Find Interpretive Comment and Clinical Information here:

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Selenium,Urine	Trace Elements	24 hour urine collected in an unused 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	<u>SI Units:</u> Random Urine: 0.25-1.14 µmol/L µmol/mol creatinineAgeFe maleMale0-1129-13629-12912-1918-8318-8020-2921-9316-7130-3925-11318-8340-4930-13419-8850-5935-15822-10160-6935-15623-10670-7936-16325-114≥8044-20029-129 24 Hour Urine: 0.38-1.65 µmol/d <u>Conventional Units:</u> Random Urine: 20.0-90.0 µg/L (more...)		

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Selenium,Whole Blood Se	Trace Elements	BD Royal Blue K2-EDTA Vacutainer. Reference #368381 TRACE ELEMENTS REQUISITION	Batched Analysis	SI Units (Reported on Patient Chart): 2.0-3.3 µmol/L Conventional Units: 160-261 µg/L	2012-02-02	Reference Ranges are based on Non-Occupationally exposed population. Find Interpretive Comment and Clinical Information here:
Seminal Analysis (Post Vasectomy ONLY)	Core	Semen GENERAL LABORATORY REQUISITION	Monday - Friday - VH and SJHC only. 0800 - 1600 h	No spermatozoa should be detected in at least two samples taken two to four weeks apart.	2006-12-27	
Serotonin 5-Hydroxytryptamine 5-HT	Endocrinology	Pre-chilled 6 mL Red or Gold top Vacutainer tube GENERAL LABORATORY REQUISITION	Monday - Friday 0800-1600	170-1134 nmol/L	2009-02-12	
Serotonin, 24-Hour Urine	Endocrinology	24 Hour urine GENERAL LABORATORY REQUISITION	Monday - Friday 0800-1600	≤1133 nmol/day	2009-02-12	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Sertraline,Serum/Plasma Zoloft	Core	5 mL Gold top Vacutainer tube or 6 mL Dark Green (Sodium Heparin) top Vacutainer tube GENERAL LABORATORY REQUISITION	As required	0-980 nmol/L		Referred out Monday - Thursday. Toxic: Greater than 980 nmol/L Do not use serum separator tubes (SST).
Serum Free Light Chains Free Kappa light chains Free Lambda light chains Immunoglobulins, Free light chains	Clinical Immunology	5 mL Gold top Vacutainer tube GENERAL LABORATORY REQUISITION		Free Kappa Chains: 3.3-19.4 mg/L Free Lambda Chains: 5.7-26.3 mg/L Kappa:Lambda ratio: 0.26-1.65 Adjusted Kappa:Lambda ratio for chronic kidney disease: 0.37-3.10	2009-02-13	
Serum Protein Electrophoresis (see <u>Protein Electrophoresis, Serum</u>)						
Serum Viscosity Relative viscosity, Serum	Core	6 mL Red top Vacutainer tube GENERAL LABORATORY REQUISITION	Monday-Friday 0800-1600	1.4-2.0	2006-06-01	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Sex Determination (see <u>Sexing</u> (for medical indications))						
Sex Hormone Binding Globulin, Plasma/Serum SHBG	Core	<p>Adult: 4.5 mL Light Green top (Li-Heparin) Vacutainer tube</p> <p>Pediatric: 0-2 years: 0.5 mL Light Green top (Li-Heparin) Microtainer 2-10 years: 3 mL Light Green top (Li-Heparin) Vacutainer tube</p> <p>Red or Gold top tubes are also acceptable</p> <p>Lavender top (EDTA) tubes are NOT acceptable</p> <p>GENERAL LABORATORY REQUISITION</p>	Monday - Friday 0800-1600	<p><u>Male:</u> 20 49 years: 18.3 54.1 nmol/L ≥ 50 years: 20.6 76.7 nmol/L</p> <p><u>Female:</u> 20 49 years: 32.4 128.0 nmol/L ≥ 50 years: 27.1 128.0 nmol/L</p> <p>FREE ANDROGEN INDEX:</p> <p><u>Male:</u> 20 49 years: 35.0 92.6 % ≥ 50 years: 24.3 72.1 %</p> <p><u>Female:</u> 20 49 years: 0.3 5.6 % ≥ 50 years: 0.2 3.6 %</p>	2018-03-06	<p>Biotin may interfere with this test. Samples should not be taken from patients receiving high biotin doses (i.e. > 5 mg/day) until at least 8 hours after the last biotin administration.</p> <p>The SHBG assay has gradually accumulated a positive bias of approximately 20% since 2010 due to a manufacturing issue. The impact on the free androgen index is expected to be minor (a decrease of up to 15%, e.g. 55% vs. 47%). This bias has been corrected as of December 9, 2019.</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Sexing (for medical indications) Sex Determination Y-marker	Molecular Diagnostics	Whole blood-1 x 4 mL Lavender EDTA top Vacutainer tube MOLECULAR DIAGNOSTIC REQUISITION	As Required Monday - Friday 0800 - 1600 h	See report		<p>For more information click on: MOLECULAR DIAGNOSTIC LABORATORY N/A</p> <p>This test will be available for <u>medical indications only</u>, usually to aid in linkage analysis or to clarify prenatal diagnosis and <u>must</u> be referred from the Genetics Clinic.</p> <p>The tooth enamel gene, amelogenin, is encoded on the short arm of the X chromosome¹. The Y chromosome, however, bears an amelogenin-like sequence which is shorter by 177bp than that on the X chromosome. Knowing this, it is possible to determine tissue sex status, by PCR amplification f (more...)</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
SHBG (see <u>Sex Hormone Binding Globulin, Plasma/Serum</u>)						
Shigella Culture (see <u>Faeces Culture</u>)						
Sialidase (see <u>Alpha-N-Acteylneuraminidase, Fibroblasts</u>)						
Sickle Cell Screen	Core	4 mL K ₂ or K ₃ EDTA Lavender top Vacutainer tube Pediatric: 0-2 yrs: Lavender 0.5pk. 2-10 yrs: 2 mL Lavender top GENERAL LABORATORY REQUISITION	As required	Negative		The NOVA CENTURY SCIENTIFIC kit is a qualitative test and does not distinguish between sickle cell disease and sickle cell trait. The test is positive in sickle cell disease and sickle cell trait. All positives should be further evaluated by Hemoglobin Electrophoresis.
Silver, Erythrocytes	Trace Elements	Reference number 368381 - HMMS# 11073 - 6mL K2-EDTA Royal Blue Vacutainer tube TRACE ELEMENTS REQUISITION	Batched analysis	SI Units (Reported on Patient Chart): 0.0-1.4 nmol/L Conventional Units: 0.00-0.15 µg/L		Reference Ranges are based on Non-Occupationally exposed population. Find Interpretive Comment and Clinical Information here:

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Silver, Urine	Trace Elements	24 hour urine collected in an unused 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	<u>SI Units:</u> Random Urine: 0-0.46 nmol/L nmol/mol creatinineAgeFe maleMale0-110- 55.20-52.712- 190-33.60- 32.620-290- 38.00-29.030- 390-45.90- 33.840-490- 54.50-35.750- 590-64.40- 41.060-690- 63.50-42.970- 790-66.20-46.4≥ 800-81.30-52.7 24 Hour Urine: 0-0.61 nmol/d <u>Conventional Units:</u> Random Urine: 0-0.050 µg/L ng/g (more...)	2003-09-17	Reference Ranges are based on Non-Occupationally exposed population. Find Interpretive Comment and Clinical Information here:

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Silver, Whole Blood	Trace Elements	Reference number 368381- HMMS# 11073 - 6mL K2-EDTA Royal Blue Vacutainer tube TRACE ELEMENTS REQUISITION	Batched analysis	SI Units (Reported on Patient Chart): 0.0-3.2 nmol/L Conventional Units: 0.00-0.34 µg/L		Reference Ranges are based on Non- Occupationally exposed population. Find Interpretive Comment and Clinical Information here:
Sinequan (see <u>Doxepin + Desmethyldoxepin, Serum</u>)						
Sirolimus, Whole Blood Rapamycin	Toxicology/Special Chemistry	4 mL K ₂ or K ₃ EDTA Lavender top Vacutainer tube Pediatric: 0-2 yrs: 0.5 mL Lavender 2-10 yrs: 3 mL Lavender top GENERAL LABORATORY REQUISITION	Tested daily: specimens received in Core lab after 10:00am will be processed the next working day.	No established reference range. Concentrations are measured in ug/L	2011-09-07	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Skin / Fetal Tissue Chromosome Analysis QF-PCR Microarray	Cytogenetics (VH)	2-3 mm ² skin in a sterile container with Hank's Balanced Salt Solution (HBSS) CYTOGENETICS REQUISITION . (must include patient's name, address, Ontario Health Insurance Number, PIN (if applicable), originating location, Dr's full name and address, test requested, specimen type and pertinent clinical information. GENOMIC MICROARRAY REQUISITION	As required	See final report		The Cytogenetics Lab is staffed from 0700-1700 (Monday-Friday), Ext. 78974 (office), or 75714 (lab). For additional information please refer to the Cytogenetics Webpage. See final report Collect sample as aseptically as possible and send to the laboratory within 24 hours.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Skin Antibodies (see <u>Pemphigus/Pemphigoid Antibodies</u>)						
Sly Syndrome (see <u>Beta-Glucuronidase, Leukocyte/Plasma/Fibroblasts</u>)						
Sodium (see <u>Electrolytes,Plasma</u>)						
Sodium (fluid) (see <u>Electrolytes,Fluid</u>)						
Sodium (urine) (see <u>Electrolytes,Urine</u>)						
Sodium, 24-Hour Urine	Core	24 Hour urine collection GENERAL LABORATORY REQUISITION	Weekdays	40-217 mmol/d		

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Sodium, Urine (tested in Trace Elements Lab)	Trace Elements	24 hour urine collected in an unused 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	<u>SI Units:</u> Random Urine: 40-200 mmol/L mol/mol creatinineAgeFe maleMale0- 114.5-23.84.5- 22.712-192.9- 14.52.8-14.120- 293.3-16.42.5- 12.530-394.0- 19.82.9-14.640- 494.7-23.53.1- 15.450-595.6- 27.83.5-17.760- 695.5-27.43.7- 18.570-795.7- 28.64.0-20.0≥ 807.0-35.14.5- 22.7 24 Hour Urine: 40-217 mmol/d <u>Conventional</u> <u>Units:</u> Random Urine: (more...)		Reference Ranges are based on Non-Occupationally exposed population. Find Interpretive Comment and Clinical Information here:

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Sodium,Fluid	Core	Fluid GENERAL LABORATORY REQUISITION	As required	N/A	2010-05-17	
Sodium,Urine- Random	Core	Random urine GENERAL LABORATORY REQUISITION	As required	40-200 mmol/L		
Soft Tissue (see <u>Image-Guided Fine Needle Aspirate Cytology, Non-Image Guided Fine Needle Aspiration Biopsy for Cytology</u>)						
Somatomedin C (see <u>Insulin-Like Growth Factor, Serum</u>)						
Somophyllin (see <u>Theophylline, Serum</u>)						
SPE (see <u>Protein Electrophoresis, Serum</u>)						
Specific Gravity,Fluid	Core	Fluid GENERAL LABORATORY REQUISITION	Weekdays	See report	2010-05-17	
Sphingomyelinase, Fibroblast Niemann-Pick Disease Type A and Type B	Biochemical Genetics	Fibroblast Culture REGIONAL CYTOGENETI CS REQUISITION	As required	56-113 nmol/hr/mg protein	2008-06-10	
Sputum (see <u>Respiratory and Exfoliative samples for Cytology</u>)						
St. Louis Encephalitis (see <u>Arbovirus Flavivirus Serology/PCR</u>)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Stelazine, Serum Trifluoperazine	Core	2 X 5 mL Gold top Vacutainer tube GENERAL LABORATORY REQUISITION	As required	Therapeutic: 0.2 - 1.2 µmol/L		Referred out Monday - Thursday Toxic: Greater than 5.0 µmol/L Test also possible on gastric lavage and random urine samples.
Sterility Culture	Microbiology/Epi demiology	For products and specimens not requiring a U.S.P. sterility test. MICROBIOLOG Y REQUISITION	Daily			
Sterility Culture U.S.P.	Microbiology/Epi demiology	See Collection Information MICROBIOLOG Y REQUISITION	Daily but testing of an initial product must be arranged with Epidemiology at ext. 57412.			
Stomach Brush/Wash (see <u>Gastrointestinal/Hepatobiliary Specimens for Cytology</u>)						
Stones (see <u>Calculi, Renal</u>)						
Stool Culture (see <u>Faeces Culture</u>)						
Stool Culture for Botulism (see <u>Botulism (Botulism Toxin)</u>)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Stool for Fat Random Stool Fat	Core	Random stool GENERAL LABORATORY REQUISITION	Referred out as required Monday - Thursday	GDML changed the stool for fat report format effective May 21, 2013. The method changed from semi- qualitative to qualitative with a revised NORMAL reference range. A comment noting the change was added to the reports.	2007-09-18	
Streptococcal Antibody Screen (see <u>Anti Streptolysin O Screen: ASO Screen and Titre</u>)						
Streptococcal Group B Screen Group B Strept Screen	Microbiology (VH)	Placental, vaginal/rectal swab MICROBIOLOG Y REQUISITION	Daily		2006-07-01	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Strongyloides Serology	Microbiology (VH)	Blood-5 mL Gold or 6 mL Red top Vacutainer tube PUBLIC HEALTH LABORATORY TEST REQUISITION	Daily		2010-09-28	<p>Adequate clinical and epidemiological information must accompany the specimen.</p> <p>Clearly indicate on label and requisition "STRONGYLOIDES SEROLOGY". Must be ordered by the Lab.</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Strontium,Urine	Trace Elements	24 hour urine collected in an unused 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	<u>SI Units:</u> Random Urine: 0.34-1.82 µmol/L µmol/mol creatinine AgeFe maleMale0-1139-21739-20712-1925-13224-12820-2928-15021-11430-3934-18125-13340-4940-21526-14050-5948-25330-16160-6947-25032-16970-7949-26134-182≥8060-32039-207 24 Hour Urine: 0.46-2.62 µmol/d <u>Conventional Units:</u> Random Urine: 30-160 µg/L (more...)		Reference Ranges are based on Non-Occupationally exposed population. Find Interpretive Comment and Clinical Information here:

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Sudafed (see <u>Pseudoephedrine, Urine Qualitative</u>)						
Sulfatides, Urine Metachromatic Leukodystrophy MLD	Core	Random urine GENERAL LABORATORY REQUISITION	As required	See report	2008-06-10	
Sulfite Oxidase Deficiency (see <u>Sulfocysteine, Urine</u>)						
Sulfocysteine, Urine Sulfite Oxidase Deficiency Molybdenum Cofactor Deficiency	Biochemical Genetics	Random urine GENERAL LABORATORY REQUISITION	As required	0-50 umol/g creatinine	2008-06-10	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Sulfur, Urine	Trace Elements	24 hour urine collected in an unused 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	<u>SI Units:</u> Random Urine: 4.4-18.7 mmol/L mmol/mol creatinineAgeFe maleMale0- 110.50-2.230.50- 2.1312-190.32- 1.360.31-1.3220- 290.36-1.530.27- 1.1730-390.43- 1.850.32-1.3740- 490.51-2.200.34- 1.4450-590.61- 2.600.39-1.6660- 690.60-2.560.40- 1.7370-790.62- 2.670.44-1.87≥ 800.77-3.280.50- 2.13 24 Hour Urine: 7.8-25.0 mmol/d <u>Conventional</u> <u>Units:</u> Random Urine: (more...)		Reference Ranges are based on Non-Occupationally exposed population. Find Interpretive Comment and Clinical Information here:

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Surmontil (see <u>Trimipramine, Serum</u>)						
Sweat Chloride (see <u>Chloride, Sweat</u>)						
Syphilis (see <u>Syphilis Antibody Screen</u>)						
Syphilis Antibody Screen Syphilis	Microbiology (VH)	Blood-5 mL Gold or 6 mL Red top Vacutainer tube PUBLIC HEALTH LABORATORY TEST REQUISITION	Referred out weekdays to Public Health Laboratory.		2010-09-28	
Syphilis VDRL (CSF Only) (see <u>VDRL</u>)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Systemic Sclerosis Profile Anti Scl-70 Anti CENP A Anti CENP B Anti RP11 Anti RP155 Anti Fibrillarin Anti NOR90 Anti Th/To Anti PM-Scl100 Anti PM-Scl75 Anti Ku Anti PDGFR Anti Ro-52	Clinical Immunology	Adult: 5 mL Gold top Vacutainer tube or 6 mL Red top Vacutainer tube as well as EDTA, Heparin or Citrate plasma Pediatric: 0-2 years: Red 0.5 mL Microtainer 2-10 years: 2 mL Red top tube GENERAL LABORATORY REQUISITION	Batch analysis	Negative	2019-12-12	This test is available exclusively to Rheumatologists and Respirologists at LHSC/SJHC and accepted from referred in locations. Immunoblot results will be reported as either negative or positive for specific antibodies as the following: (+) Borderline 1+ Weak Positive 2+ Positive 3+ Strong Positive