

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|--|------------------------------|---|------------------------------|--------------------------|----------------|--|
| G-6-PD Assay (see <u>Glucose-6-Phosphate Dehydrogenase Assay</u>) | | | | | | |
| G-Banding (see <u>Chromosome Analysis, Blood, Chromosome Analysis, Bone Marrow/Blood Oncology Studies, Chromosome Analysis, Lymph Node/Tumor</u>) | | | | | | |
| G6PD Assay (see <u>Glucose-6-Phosphate Dehydrogenase Assay</u>) | | | | | | |
| Gabapentin, Serum/Plasma Neurontin | Toxicology/Special Chemistry | 6 mL Red or 6 mL Green or 4 mL Lavender top Vacutainer tube GENERAL LABORATORY REQUISITION | Monday - Friday 0800-1600 | 12.0 - 120.0 μ mol/L | 2006-06-01 | Alert value is 140.0 μ mol/L. Minimum effective concentration is 12.0 μ mol/L. A desirable clinical outcome may be expected between 70.0-120.0 μ mol/L. Toxicity may occur with increasing frequency above 146.0 μ mol/L. |
| GALACTOM (Serum) (see <u>Galactomannan Aspergillus Antigen, Serum</u>) | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|--|---------------------|--|--|--------------------------|----------------|---|
| Galactomannan Aspergillus Antigen, Fluid GALTCTOMF (BAL Fluid) | Clinical Immunology | Bronchoalveolar lavage (BAL) fluid GENERAL LABORATORY REQUISITION | Batched twice weekly Monday/Tuesday and Wednesday/Thursdays routinely Note: Samples to be in lab no later than noon Monday and Wednesday to be pretreated for set up the following day. | Index: <0.5 Non-Reactive | 2013-11-25 | <p>Test limited to Infectious disease, Hematologists, Respirologists and Microbiologists</p> <p>NOTE: Outside clients must have pre-authorization by the LHSC microbiologist before sending.</p> <p>Piperacillin/Tazobactam have been associated with false positive results, if deemed a false positive result please contact the microbiologist.</p> <p>Refer to template associated with the report.</p> <p>Send samples directly to the lab unopened. It is imperative that samples have minimal exposure to air before testing. Store at 2oC-8oC after hours.</p> |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|--|------------------------|--|--|------------------------------|----------------|---|
| Galactomannan Aspergillus Antigen, Serum GALACTOM (Serum) | Clinical Immunology | 5 mL Gold top Vacutainer tube GENERAL LABORATORY REQUISITION | Batched twice weekly Monday/Tuesday and Wednesday/Thur sdays routinely NOTE: Samples to be in lab no later than noon <u>Monday</u> and <u>Wednesday</u> . | Index: <0.5 Non- Reactive | 2013-11-25 | <p>Test limited to Infectious disease, Hematologists, Respirologists, Microbiologists</p> <p>NOTE: Outside clients must have pre-authorization by the LHSC microbiologist before sending.</p> <p>Piperacillin/Tazobactam have been associated with false positive results, if deemed a false positive result please contact the microbiologist.</p> <p>Refer to template associated with the report. Send samples to the lab unopened. It is imperative that samples have minimal exposure to air before testing. Store (more...)</p> |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|--|----------------------|---|---------------|--|----------------|----------|
| Galactose-1-Phosphate and Galactose, Erythrocytes Galactosemia | Biochemical Genetics | 4 mL K ₂ or K ₃ EDTA Lavender top Vacutainer tube Pediatric 0-2 yrs: 3 x 0.5 mL Lavender top 2-10 yrs: 3 mL Lavender top BIOCHEMICAL GENETICS LAB REQUISITION | As required | Galactose-1-Phosphate: 0-50 ug/g Hb Galactose: <5 ug/g Hb | 2010-11-26 | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|----------------------|--|---------------|-------------------------------|----------------|----------|
| Galactose-1-Phosphate Uridyltransferase- Qualitative, Dried Blood Spot Galactosemia Screen | Biochemical Genetics | Dried blood spots on a Newborn Screening-type card. Blood can be from a heel prick, finger prick, or Green top (Sodium or Lithium Heparinized) Vacutainer tube. BIOCHEMICAL GENETICS LAB REQUISITION | As required | | 2010-11-26 | |
| Galactose-6-Sulfatase, Fibroblast MPSIVA Morquio A Disease | Biochemical Genetics | Fibroblast Culture BIOCHEMICAL GENETICS LAB REQUISITION | As required | 95-360 nmol/mg protein/17 hr. | 2008-06-10 | |
| Galactosemia (see <u>Galactose-1-Phosphate and Galactose, Erythrocytes</u>) | | | | | | |
| Galactosemia Screen (see <u>Galactose-1-Phosphate Uridyltransferase-Qualitative, Dried Blood Spot</u>) | | | | | | |
| GALTCTOMF (BAL Fluid) (see <u>Galactomannan Aspergillus Antigen, Fluid</u>) | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|--|------------------------------|--|------------------------------|---|----------------|--|
| Gamma Glutamyl Transferase, Plasma GGT GGTP | Core | 4.5 mL Green (Lithium Heparin) top Vacutainer Serum from a 5 mL Gold top or 6 mL Red top Vacutainer tube is also acceptable. Pediatric: 0-2 years: 0.5 mL Green top Microtainer 2-10 years: 3 mL Green top tube GENERAL LABORATORY REQUISITION | As required | 0-5 days: <185 U/L 6 days-6 months: <204 U/L Males >6 months: <61 U/L Females >6 months: <41 U/L | 2009-08-07 | Hemolysis may affect results Pediatric values may be high, falling to adult levels at puberty. Elevated in obstructive jaundice, intrahepatic cholestasis and some liver metastases. May be normal or near normal with hepatitis or cirrhosis; also increased by alcohol, anticonvulsants and barbiturates. |
| Gamma-Hydroxybutyrate, Urine-Qualitative Test GHB | Toxicology/Special Chemistry | Random urine GENERAL LABORATORY REQUISITION | Monday - Friday 0800-1600 | Negative | 2008-06-06 | |
| GAP (see <u>Electrolytes, Plasma</u>) | | | | | | |
| Garamycin (see <u>Gentamicin, Serum/Plasma</u>) | | | | | | |
| | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|----------------|------------|--|-------------------------------|-----------------|----------------|---|
| Gastrin, Serum | Core | <p>Adult: 5 mL Gold top Vacutainer tube</p> <p>Pediatric: 2-10 years: 3 mL Gold top Vacutainer tube GENERAL LABORATORY REQUISITION</p> | Referred out Monday-Friday | < 100 ng/L | 2017-11-07 | <p>Main use is to diagnose Zollinger-Ellison syndrome (gastrinoma).</p> <p>Elevated levels also occur with pernicious anemia, atrophic gastritis, previous vagotomy, renal failure, or use of acid suppressing drugs such as histamine H₂-receptor antagonists or proton pump inhibitors.</p> <p>Allow blood to clot at room temperature and separate WITHIN 30 minutes by centrifugation. Transfer serum to a labelled tube, cap tightly, and freeze.</p> |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|------------------------|--------------|--|---|-----------------|----------------|----------|
| Gastrointestinal Virus | Microbiology | Faeces (1 to 2 grams) PUBLIC HEALTH LABORATORY TEST REQUISITION | Referred weekdays to Public Health Laboratory | See report | 2019-12-18 | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|--|------------------|--|---------------|-----------------|----------------|---|
| Gastrointestinal/Hepatobiliary Specimens for Cytology Esophageal Brush/Wash Stomach Brush/Wash Bileduct Brush/Wash Duodenal Brush/Wash | Cytopathology-UH | Non-Gynaecological: Gastrointestinal/Hepatobiliary CYTOPATHOLOGY REQUISITION-NON-GYNAECOLOGICAL AREA | Weekdays | | 2005-08-01 | Brush devices should be cut just above the brush area and totally immersed in Cytolyt solution. Cytopathology Laboratory Room A3-242 UH (519) 685-8500 x 36391/36392 Clinical history is an important component for diagnostic interpretation. The specimen is Thinprep processed so the total specimen volume should not exceed one orange top specimen container with Cytolyt included. |
| Gaucher Disease (see <u>Beta-Glucocerebrosidase, Leukocyte/Fibroblasts</u>) | | | | | | |
| Gaucher Disease Monitoring (see <u>Chitotriosidase, Plasma</u>) | | | | | | |
| GBS Screen (see <u>Group B Streptococcus Screen</u>) | | | | | | |
| GC Culture (see <u>Neisseria gonorrhoeae Culture</u>) | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|------------|---|---------------|---|----------------|----------|
| GeneXpert (see <u>Coronavirus SARS-CoV-2 2019 Diagnostic Priority (GXRVP)</u> Adult ED and Critical Care Admissions only) | | | | | | |
| Genomic Microarray (see <u>Prenatal Microarray</u>) | | | | | | |
| Gentamicin,Serum/PI asma Garamycin Aminoglycosides | Core (VH) | 4.5 mL Green (Lithium Heparin) top Vacutainer tube Serum from a 5 mL Gold top or 6 mL Red top Vacutainer tube is also acceptable. Pediatric: 0-2 years: 0.6 mL Green top Microtainer (BD 365985) 2-10 years: 2 mL Green top tube GENERAL LABORATORY REQUISITION | Daily | <u>Therapeutic Range:</u> Trough (Pre Dose): < = 1.4 mg/L Peak (Post Dose): 6-10 mg/L | 2010-07-12 | |
| Gestational Glucose Tolerance Test (see <u>Glucose Tolerance Test</u>) | | | | | | |
| GGT (see <u>Gamma Glutamyl Transferase,Plasma</u>) | | | | | | |
| GGTP (see <u>Gamma Glutamyl Transferase,Plasma</u>) | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|------------|--|---------------|---|----------------|--|
| GHB (see <u>Gamma-Hydroxybutyrate, Urine-Qualitative Test</u>) | | | | | | |
| Gliadin (DGP) Antibodies Anti Deamidated Gliadin Peptide | Core | 6 mL Red top Vacutainer tube GENERAL LABORATORY REQUISITION | As required | For Deamidated Gliadin Antibody IgA and IgG: <20 CU: Negative 20-30 CU: Weakly Positive >30 CU: Positive | 2010-01-07 | Referred out Monday - Thursday The test done for Celiac Disease is Tissue Transglutamase Antibodies. For screening for diagnosis of Celiac Disease, the patient should not be on a gluten free diet. False negative results may occur in individuals who are IgA-deficient. |
| Glomerular Basement Membrane, IgG antibody (see <u>Anti Glomerular Basement Membrane, Serum</u>) | | | | | | |
| | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|------------------|------------|---|------------------------------|--|----------------|----------|
| Glucagon, Plasma | Core | <p>Adult: 4 mL Lavender top Vacutainer tube</p> <p>Pediatric: 0-2 years: 2-3 x 0.5 mL Lavender top Microtainers 2-10 years: 3 mL Lavender top Vacutainer tube</p> <p>GENERAL LABORATORY REQUISITION</p> | Referred out Monday-Thursday | <p>< or =6 hours: 100-650 pg/mL 1-2 days: 70-450 pg/mL 2-4 days: 100-650 pg/mL 4-14 days: declining gradually to adult levels >14 days: < or =80 pg/mL (range based on 95% confidence limits)</p> | 2014-07-14 | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|------------|--|----------------------------------|--|----------------|----------|
| Glucose Tolerance Test GTT Gestational Glucose Tolerance Test | Core | 4.5 mL Green top Vacutainer tube 4.5 mL Grey top Vacutainer tube Pediatric: 0-2 years: 0.5 mL Green Microtainer 2-10 years: 3 mL Green top tube GENERAL LABORATORY REQUISITION | Monday - Friday 0800 - 1600 h | * See Interpretive Comments for the diagnosis of Diabetes Mellitus | 2007-01-11 | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|--|------------|--|---------------|---|----------------|----------|
| Glucose, Plasma Random Glucose Fasting Glucose | Core | 4.5 mL Green top Vacutainer tube 4.5 mL Grey top Vacutainer tube Pediatric: 0-2 years: 0.5 mL Green top Microtainer 2-10 years: 3 mL Green top tube GENERAL LABORATORY REQUISITION | As required | Random < 1 year 2.6-11.0 mmol/L > 1 year 3.4-11.0 mmol/L Fasting levels - no caloric intake for at least 8 hours 3 years - 16 years: 2.8-6.1 mmol/L Adult (greater than 16 years): 3.9-6.1 mmol/L | 2008-11-15 | |
| Glucose,CSF | Core | CSF GENERAL LABORATORY REQUISITION | As required | 2.2-3.9 mmol/L | | |
| Glucose,Fluid | Core | Fluid GENERAL LABORATORY REQUISITION | As required | See Report | 2010-05-17 | |
| | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|------------|---|----------------------------|------------------|----------------|---|
| Glucose-6-Phosphate Dehydrogenase Assay G6PD Assay G-6-PD Assay | Core | 4 mL K ₂ or K ₃ EDTA Lavender top Vacutainer tube Pediatric: 0-2 years: 0.5 mL Lavender top Microtainer 2-10 years: 3 mL Lavender top tube GENERAL LABORATORY REQUISITION | Monday-Friday 0800-1600 | 8.3-17.0 IU/g Hb | 2008-11-15 | <p>Reticulocytes have higher G-6-PDH levels than mature red cells. It is not recommended that assays be performed after a severe hemolytic crisis, since G-6-PDH levels may appear falsely elevated."</p> <p>Leukocytosis falsely elevates G-6-PDH levels in extreme anemia. Intermediate Deficiency: 2.0-8.2 IU/g Hb Severe Deficiency: <2.0 IU/g Hb Glucose-6-phosphate dehydrogenase (G6PD) is an enzyme in the pentose phosphate pathway, a metabolic pathway that supplies reducing energy to cells. Patients with G6PD deficiency are (more...)</p> |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|------------|---|-------------------------------------|----------------------------------|----------------|----------|
| Glutamic Acid Decarboxylase-65 Antibodies (see <u>Anti Glutamic Acid Decarboxylase, Serum/CSF</u>) | | | | | | |
| Glutethimide, Serum Doriden | Core | 5 mL Gold top Vacutainer tube Avoid gel- separator tubes GENERAL LABORATORY REQUISITION | Referred out Monday- Thursday | Therapeutic: 0.9 - 3.7 µmol/L | 2005-07-01 | |
| | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|------------|---|---------------|---|----------------|--|
| Glycated Hemoglobin Glycosylated Hemoglobin Hemoglobin A1c HbA1c | Core | 4 mL K ₂ or K ₃ EDTA Lavender top Vacutainer tube Pediatric: 0-2 years: 0.5 mL Lavender top Microtainer 2-10 years: 3 mL Lavender top tube GENERAL LABORATORY REQUISITION | As required | Non-diabetic: <6.0% Prediabetes: 6.0% - 6.4% Diabetes: > or = 6.5% Target levels for Type1 and Type 2 Diabetes: < or =7% | 2010-06-28 | HbA1c measurement is an index of the integrated plasma glucose values over the past 6-8 weeks, which is not subject to the fluctuations observed in blood glucose concentrations. Therefore we will cancel duplicates as "HbA1c already tested within 6 wks". Screening and Diagnosis of Type 2 Diabetes HbA1c Result (%) Dysglycemia Category <5.5Non-diabetic 5.5-5.9At Risk 6.0-6.4Prediabetes >or=6.5 Diabetes Therapeutic Targets Adults Results (%) Targets Less than or = 6.5Adults with (more...) |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|------------|--|---------------|-----------------|----------------|---|
| Glycol Screen Glycols Ethylene Glycol Propylene Glycol | Core (VH) | 5 mL Gold top Vacutainer tube. Lithium Heparin or EDTA plasma is also acceptable. Pediatric: 0-2 years: 0.5 mL Red top Microtainer 2-10 years: 2 mL Red top tube GENERAL LABORATORY REQUISITION | As required | Negative | | CRITICAL VALUE to be phoned to Nurse or Physician immediately: All positive results. Toxic: >3.2 mmol/L Should be requested specifically if poisoning suspected. Performed by Gas Liquid Chromatography as part of Glycol Fractionation. Glycol and Volatile Ordering Technical Aid For SRA staff when a sample is received at UH: UH SRA: Please call VH SRA when a sample is received. VH SRA: Please alert technologist that a sample is on the way (more...) |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|----------------------|---|---------------|-----------------|----------------|--|
| Glycols (see <u>Glycol Screen</u>) | | | | | | |
| Glycosylated Hemoglobin (see <u>Glycated Hemoglobin</u>) | | | | | | |
| GM2 Gangliosidosis (see <u>Beta-N-Acetylhexosaminidase %A, A, A+B, Leukocyte/Plasma/Fibroblasts</u>) | | | | | | |
| GMI Gangliosidosis (see <u>Beta-Galactosidase, Leukocyte/Plasma/Fibroblasts</u>) | | | | | | |
| Gonorrhoeae culture (see <u>Neisseria gonorrhoeae Culture</u>) | | | | | | |
| Gravol (see <u>Diphenhydramine, Urine Qualitative</u>) | | | | | | |
| Group and Screen (used for Blood Grouping, Antibody Screen and Crossmatching) | Blood Transfusion | Pediatric <4 months: 1 mL Lavender (EDTA) Infants >4 months and <3 years: 2 mL Lavender (EDTA) top Children >3 years and Adults: 6 mL Pink (EDTA) top Vacutainer tube BLOOD TRANSFUSION REQUISITION or Electronic order | Daily | See report | 2012-06-25 | Crossmatched blood can be available within 5 to 10 minutes upon receipt of request to convert Group and Reserve to crossmatch. N/A |
| Group B Strept Screen (see <u>Group B Streptococcus Screen</u>) | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|-------------------|--|---------------|-----------------|----------------|----------|
| Group B Streptococcus Screen Group B Strept Screen GBS Screen | Microbiology (VH) | Placental, vaginal/rectal swab MICROBIOLOGY Y REQUISITION | Daily | | 2006-07-01 | |
| | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|------------|---|--|--|----------------|---|
| Growth Hormone, Plasma/Serum Human Growth Hormone hGH | Core | <p>Adult: 4.5 mL Light Green (Li-Heparin) top 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, Gold, or Lavender (EDTA) top tubes are also acceptable</p> <p>GENERAL LABORATORY REQUISITION</p> | <p>Samples are batched and only performed on Wednesday afternoon. Received samples from outside this timeframe are aliquoted and frozen.</p> | <p><u>Male:</u> 0 10 years: ≤ 6.3 g/L* 11 17 years: ≤ 10.8 g/L* 21 77 years: ≤ 2.5 g/L*</p> <p><u>Female:</u> 0 10 years: ≤ 7.8 g/L* 11 17 years: ≤ 8.1 g/L* 21 77 years: ≤ 9.9 g/L*</p> <p>*Basal levels of growth hormone do not have diagnostic relevance. Stimulation or suppression tests are needed to diagnose a growth hormone-related disorder.</p> <p>Children: ≥ 6 g/L followin (more...)</p> | 2017-08-14 | <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>This assay is affected by pegvisomant (a highly selective growth hormone receptor antagonist).</p> <p>This assay is not suitable for pregnant women due to cross-reactivity with placental growth hormone.</p> |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|------------|---------------|---------------|-----------------|----------------|----------|
| GSDII (see <u>Alpha-Glucosidase, Dried Blood Spot, Alpha-Glucosidase, Fibroblasts</u>) | | | | | | |
| GTT (see <u>Glucose Tolerance Test</u>) | | | | | | |
| GXRVP (see <u>Coronavirus SARS-CoV-2 2019 Diagnostic Priority (GXRVP)</u> Adult ED and Critical Care Admissions only) | | | | | | |
| | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|--|------------------|--|---------------|-----------------|----------------|---|
| Gynaecological Conventional Smear for Cytology PAP Smear Combined Cervical/Endocervical Smear Endocervical Smear Vaginal Smear | Cytopathology-UH | Gynaecological: Conventional Smear Smear on fixed slide CYTOPATHOLOGY REQUISITION-GYNAECOLOGICAL AREA | Weekdays | | 2005-08-01 | Cytopathology Laboratory Room A3-242 UH (519) 685-8500 x 36391/36392 Clinical history is an important component for diagnostic interpretation. Please check pertinent clinical information on the requisition. Spray the smeared slide immediately with Cytology spray fixative. Allow to dry before placing in the slide transport container. Using a pencil label the frosted end of the smeared slide with the patient's name. Unlabelled slides cannot be processed |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|--|------------------|--|---------------|-----------------|----------------|--|
| Gynaecological Liquid Based PAP test for Cytology Liquid based PAP test for Cytology PAP test LBP | Cytopathology-UH | Cervical, endocervical, vaginal sample in a specimen container CYTOPATHOLOGY REQUISITION-GYNAECOLOGICAL AREA | Weekdays | | 2005-08-01 | Cytopathology Laboratory Room A3-242 UH (519) 685-8500 x 36391/36392 Clinical history is an important component for diagnostic interpretation. The specimen in Thinprep processed so the specimen should be collected in specific gyn. collection containers. |