

- **This chart shall be used only for minimum volume collection on pediatric patients.**
- Recommended limit of draw of 1.7mL /kg of weight/day for a child.
- If blood is transferred to a microtainer, state venous or arterial on the requisition/labels.
- **The asterisk \* indicates blood may be collected via capillary puncture and absolute minimum volumes for LAVENDER AND GREEN MICROTAINERS.**
- Refer to Laboratory Service Manual (LSM) for tests not listed in this table.

Test	Minimum Volume	Collection Tube/Container
<b>HEMATOLOGY</b>		
CBC / Retics	0.5 mL*	LAVENDER
ESR	1.5 mL	LAVENDER
APTT, PT, Fibrinogen, D-Dimer	1.8 mL ( <i>fill to line</i> )	BLUE
Anti – Xa Heparin ( <i>venous sample only</i> )	1.8 mL	BLUE
Factor – 2, 5, 7, 8, 9, 10, 11, 12	2.7 mL	BLUE
Lupas Anticoagulant	2.7 mL (X2)	BLUE
Thrombophilia Investigation		
<ul style="list-style-type: none"> <li>○ If a CBC is ordered along with the Thrombophilia Investigation, an extra LAV must be collected.</li> </ul>		
<b>THROMBOPHILIA INVESTIGATION TESTS</b>		
<ul style="list-style-type: none"> <li>○ Anticardiolypin Antibody</li> <li>○ Antithrombin 3</li> <li>○ Protein C, Protein S</li> <li>○ APTT, Fibrinogen</li> </ul>	2.7 mL (X2)	BLUE
○ Factor 5 Leiden and PR202	2.7 mL	LAVENDER
○ Homocysteine	2.0 ml	LAVENDER ( <i>on ice</i> )
○ ACL	1.5 mL	GOLD
Von Willibrands includes VXF Ag and VWF Fx	2.7 mL	BLUE
<b>TRANSFUSIONS MEDICINE</b>		
Group and Type, and DAT (Direct Antiglobulin Test)	0.5 mL*	LAVENDER
Group and Screen ( <i>venous sample only-cannot be a capillary sample</i> )	1.0 mL	LAVENDER

Test	Minimum Volume	Collection Container
<b>CHEMISTRY</b>		
<ul style="list-style-type: none"> <li>The following chart of routine chemistry tests <b>can all be analysed on 0.5 mL of blood</b> for all or any combination.</li> <li>Collect 0.5 mL of blood in a LIGHT GREEN tube or GREEN microtainer.</li> </ul>		
<b>ROUTINE CHEMISTRY TESTS</b>		
<b>ALB</b>	<b>Creatinine</b>	<b>Iron/TIBC</b>
<b>ALP</b>	<b>CRP</b>	<b>LD</b>
<b>ALT</b>	<b>Ferritin</b>	<b>LIPASE</b>
<b>AST</b>	<b>Glucose</b>	<b>Magnesium</b>
<b>Bilirubin (total and direct)</b>	<b>GGT</b>	<b>Phosphate</b>
<b>Calcium</b>	<b>LYTES6 – Sodium Potassium Chloride TCO2 Urea Creatinine</b>	<b>TOTAL PROTEIN</b>
<b>Cholesterol/ Triglycerides</b>		<b>URIC ACID</b>
17-OH Progesterone	2 mL	GOLD
25 – Dihydroxy Vitamin D	1.0 mL	LIGHT GREEN
ACTH	2.0 mL	LAVENDER ( <i>pre-chilled on ice</i> )
AFP	0.5 mL*	LIGHT GREEN
Alcohol	0.5 mL	LIGHT GREEN ( <i>non-alcohol pad</i> )
Alpha-1-Antitrypsin	0.5 mL	LIGHT GREEN
Alpha-1-Antitrypsin Phenotype	0.5 mL	GOLD
Ammonia	0.4 mL*	DARK GREEN ON ICE
Androstenedione	2.0 mL	GOLD
Anti – DNA	1.0 mL	GOLD
Anti Nuclear Antibody (ANA)	1.0 mL	GOLD
Anti RNP/Smith	1.0 mL	GOLD
Anti SSA/SSB	1.0 mL	GOLD
ATPA (Anti Thyroid Peroxidase Antibody)	0.5 mL*	RED
B-HCG	0.4 mL*	LIGHT GREEN
Blood Gases		
<b>BLOOD GASES</b>		
<ul style="list-style-type: none"> <li>Whole blood NA, K, Lactate, HGB, Hematocrit, Glucose, CAIS reported</li> </ul>		
<ul style="list-style-type: none"> <li><b>(BGM) Capillary Gas</b> HGB and Hematocrit not reportable</li> </ul>	<b>0.125 uL*</b>	<b>HEPARINIZED BALANCED CAPILLARY TUBE ON ICE</b>
<ul style="list-style-type: none"> <li><b>(BGVT) Venous Gas</b></li> </ul>	<b>0.6 mL</b>	<b>DARK GREEN TUBE ON ICE</b>
<ul style="list-style-type: none"> <li><b>(BGVM) Venous Gas</b></li> </ul>	<b>0.6 mL</b>	<b>HEPARINIZED BALANCED SYRINGE ON ICE</b>

# Pediatric Minimum Volume Test Requirements Table

Lab Medicine Test Catalogue

Laboratory Controlled Document: Document #: LSM-847 v #: 3

*Applies to former Saskatoon Health Region area*

Test	Minimum Volume	Collection Container					
<input type="radio"/> <b>(BGM) Arterial Blood Gas</b>							
	<b>0.6 mL</b>	<b>HEPARINIZED BALANCED SYRINGE ON ICE</b>					
<b>CHEMISTRY</b>							
Carnitine	2.0 mL	GOLD					
Carboxyhemoglobin and Methemoglobin	0.6 mL	DARK GREEN Tube or HEPARIN BALANCED SYRINGE					
	0.125 uL*	HEPARIN BALANCED CAPILLARY TUBE					
CEA	0.4 mL*	LIGHT GREEN					
Ceruloplasmin	1.0 mL	GOLD					
CK	0.5 mL*	LIGHT GREEN					
Cortisol	0.5 mL	LIGHT GREEN					
FSH & LH	0.5 mL	GOLD					
G-6-PD Needs a CBC and RETIC when ordered	1.0 mL*	X 2 LAVENDERS WITH 0.5 ML IN EACH					
Growth Hormone	1.0 mL	GOLD					
HBA1C	0.5 mL*	LAVENDER					
Hereditary Spherocytosis							
<table border="1" style="width: 100%;"> <tr> <td><input type="radio"/> <b>CBC, Retics, BLDSM</b></td> <td><b>0.5 ml*</b></td> <td rowspan="2"><b>X 2 LAV (With Minimum 0.5mL In Each)</b></td> </tr> <tr> <td><input type="radio"/> <b>DAT</b></td> <td><b>0.5 mL*</b></td> </tr> </table>			<input type="radio"/> <b>CBC, Retics, BLDSM</b>	<b>0.5 ml*</b>	<b>X 2 LAV (With Minimum 0.5mL In Each)</b>	<input type="radio"/> <b>DAT</b>	<b>0.5 mL*</b>
<input type="radio"/> <b>CBC, Retics, BLDSM</b>	<b>0.5 ml*</b>	<b>X 2 LAV (With Minimum 0.5mL In Each)</b>					
<input type="radio"/> <b>DAT</b>	<b>0.5 mL*</b>						
HIV	1.0 mL	GOLD					
Hepatitis Testing Done In Chemistry							
<input type="radio"/> Hepatitis A	2.0 mL	GOLD					
<input type="radio"/> Hepatitis B Antigen	4.0 mL	GOLD					
<input type="radio"/> Hepatitis B Core	2.0 mL	GOLD					
<input type="radio"/> Hepatitis B Antibody	1.0 mL	GOLD					
<input type="radio"/> Hepatitis C	1.0 mL	GOLD					
Ionized Calcium	3.0 mL	<b>GOLD (tube must be filled)</b>					
	0.125 uL*	HEPARIN BALANCED CAPILLARY TUBE					
Immunoglobulins (IGG, IGM & IGA)	1.0 mL	LIGHT GREEN					
Ketone (Unopened tube)	0.5 mL	LIGHT GREEN					
Lactate <i>(if venous sample do not use tourniquet)</i>	0.5 mL*	<b>DARK GREEN (on ice)</b>					
	0.125 ul*	HEPARIN BALANCED CAPILLARY TUBE <b>(on ice)</b>					
Monotest	0.5 mL	GOLD					
Parathyroid Hormone	1.0 mL	LIGHT GREEN					
P-BNP	0.4 mL*	LIGHT GREEN					
Pre Albumin	0.4 mL*	LIGHT GREEN					

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*Applies to former Saskatoon Health Region area*

Protein Electrophoresis	1.0 mL	GOLD
Red Cell Folate	1.0 mL	LAVENDER
<b>Test</b>	<b>Minimum Volume</b>	<b>Collection Container</b>
Renin	3.0 mL	LAVENDER
TSH, Free T3, Free T4	0.8 mL*	LIGHT GREEN
Vitamin B12	0.5 mL	LIGHT GREEN
Wasserman (Syphilis)	2.0 mL	GOLD
<b>GENETICS</b>		
Chromosomes, FISH	1.0 mL	DARK GREEN ( <i>Sodium Heparin</i> )
DNA Banking	0.5 mL*	LAVENDER
<b>METABOLICS</b>		
Amino Acids	0.5 mL*	LAVENDER
Pyruvate	1.0 mL	LAVENDER ( <i>TECH-II must be present at bedside before collection – call 2089</i> )
<b>MICROBIOLOGY</b>		
Blood Culture	0.5 mL	PINK TOP CULTURE BOTTLE
Streptozyme Screen (ASOT)	1.0 mL	RED
<b>VIROLOGY</b>		
Mycoplasma	1.0 mL	RED
TORCH	2.0 mL	RED
Toxoplasma IGG & IGM	2.0 mL	RED
<b>DRUGS</b>		
Acetaminophen	0.4 mL*	LIGHT GREEN
Carbamazepine (Tegretol)	0.5 mL	LIGHT GREEN
Cyclosporin	0.5 mL	LAVENDER
Digoxin	0.4 mL*	LIGHT GREEN
Dilantin (Phenytoin)	0.4 mL*	DARK GREEN
Gentamicin	0.8 mL*	LIGHT GREEN
Lithium	0.5 mL	RED
Methotrexate	1.0 mL	LIGHT GREEN ( <i>on ice and protect from light</i> )
Phenobarb	0.4 mL*	DARK GREEN
Salicylate	0.4 mL*	LIGHT GREEN
Tacrolimus	1.0 mL*	LAVENDER
Tobramycin	0.8 mL*	LIGHT GREEN
Theophylline	1.0 mL*	GOLD ( <i>RED if microtainer</i> )
Valproic Acid (Depakene)	0.8 mL*	DARK GREEN
Vancomycin	0.8 mL*	GOLD ( <i>RED if microtainer</i> )