











**UCHealth Highlands Ranch Hospital – Clinical Laboratory  
Neonatal Blood Collection Guide  
CHEMISTRY**

 <p><b>Greiner Green – LiHep Minicollect Tube</b> (max fill 0.8mL)</p>		 <p><b>BD Microtainer Green – LiHep</b> (max fill 0.6mL)</p>		 <p><b>Heparinized Radiometer Capillary Tube</b> or</p>  <p><b>Tuberculin ABG Syringe w/ Balanced Heparin</b></p>		 <p><b>Greiner or BD Gold (SST) - preferred</b></p>		 <p><b>Greiner or BD Red (no gel)</b></p>	
<b>Lab Test</b>	<b>Volume</b>	<b>Lab Test</b>	<b>Volume</b>	<b>Lab Test</b>	<b>Volume</b>				
<b>Neonatal Bilirubin Total</b>	0.3 mL	<b>Blood Gas, Ionized Calcium, Whole Blood Glucose, Lactate, Whole Blood Electrolytes (K, Na, Cl)</b>	0.3 mL syringe	<b>Free T4</b>	0.5 mL				
<b>Neonatal Bilirubin Panel</b> NBIL, BU, BC	0.3 mL		1 full capillary tube	<b>Vancomycin</b>	0.5 mL				
<b>Electrolyte Panel</b> NA, K, CL, ECO2	0.4 mL		<b>Whole Blood Glucose Lactate</b>	60% full / 7 cm capillary tube	<b>Vitamin D, 25-hydroxy</b>	0.6 mL			
<b>Neonatal CMP</b> NA, K, CL, ECO2, GLU, BUN, CREA, CA, TP, ALB, TBIL, BU, BC, ALP, AST, ALT	0.8 mL (requires 2 BD Microtainers)			<b>Caffeine</b> (send-out)	1.0 mL				
<b>Neonatal HFP</b> TP, ALP, TBIL, BU, BC, ALP, AST, ALT	0.6 mL			<b>Cortisol</b> (send-out)	0.5 mL				
<b>Neonatal TPN BMP</b> NA, K, CL, ECO2, GLU, BUN, CREA, CA, BU, BC, TRIG, PHOS, MG	0.8 mL (requires 2 BD Microtainers)			<b>Insulin-Like Growth Factor</b> (send-out)	1.0 mL				
<b>Neonatal TPN CMP</b> NA, K, CL, ECO2, GLU, BUN, CREA, CA, TP, ALB, TBIL, BU, BC, ALP, AST, ALT, TRIG, PHOS, MG	0.8 mL (requires 2 BD Microtainers)								
<b>TSH</b>	0.6 mL								
<b>Gentamicin</b>	0.3 mL								
<b>MIX 10 TIMES BY INVERSION</b>			<b>NO BUBBLES</b>						

\*The volumes provided above are calculated assuming a hematocrit of 60%. A patient with a higher hematocrit will require additional volume for testing.  
\*\*Add volumes of requested tests together to get total draw volume.

**HEMATOLOGY & COAGULATION**

 <b>Greiner MiniCollect - EDTA</b>		<b>or</b>  <b>BD Lavender Top Microtainer - EDTA</b>		 <b>Greiner Blue Top 1.8 mL Draw-Size</b>		<b>or</b>  <b>BD Blue Top 1.8 mL Draw-Size</b>	
Lab Test	Volume	Lab Test	Volume				
<b>CBC, Differential, Reticulocytes, Platelet Count</b>	0.5 mL	Any combination of the following: <b>Prothrombin Time</b> <b>PTT</b> <b>D-Dimer</b> <b>Fibrinogen</b>	1.8 mL <b><u>Fill to black arrow on tube (Greiner) or clear line on tube (BD). Do not overfill or under fill.</u></b>				
<b>Neonatal Evaluation Type &amp; Screen</b> Direct & Indirect Coombs - must have two initials on the label - if the baby is to be transfused we also require either another draw or cord blood for the retype	0.8 mL						
<b>Parvovirus PCR</b>	1.0 mL						
<b>CMV PCR</b>	1.0 mL						
<b>HIV PCR</b> (1.0 mL acceptable, but decreases sensitivity)	2.0 mL						
<b>Toxoplasma gondii PCR</b>	1.0 mL						
<b>G6P</b>	1.5 mL						
<b>CMV Quant</b>	0.5 mL						
<b>MIX 10 TIMES BY INVERSION TO PREVENT CLOTTING</b>							

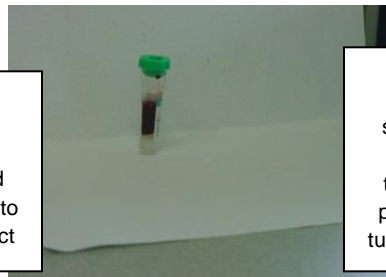
**Call the laboratory or check test catalog for questions regarding minimum collection volumes for other tests not listed here.**

**FILL & COLLECTION INSTRUCTIONS**

**Greiner MiniCollect Green Tops with Gel – How to Use:**



Use supplied funnel or drip blood directly into MiniCollect



Submit all MiniCollect samples in the amber carrier tube. This will provide optimal turnaround times.



Make sure that the zebra label is placed with the patient's name close to the top of the amber tube.

**Visual Fill Guide:**

Chemistry	Hematology, Blood Bank, and Virology	Whole Blood Capillary Tube
		<div data-bbox="1415 1149 1942 1321" style="border: 1px solid black; padding: 5px;"> <p><b>TO PREVENT CLOTS</b></p> <p>Insert the metal mixing flea and mix sample by 5 slow inversions of tube. You will feel the metal mixing flea "thump" on each end of the capillary tube as you mix.</p> </div>

## ORDERING QUICK GUIDE

**Common Neonatal Test Codes:**

Neonatal Bilirubin Total	<b>LAB7026</b>
Neonatal Bilirubin Panel	<b>LAB4222</b>
Electrolyte Panel	<b>LAB16</b>
Neonatal Complete Metabolic Panel	<b>LAB5051</b>
Neonatal Hepatic Function Panel	<b>LAB5085</b>
Neonatal TPN Basic Metabolic Panel	<b>LAB3790</b>
Neonatal TPN Complete Metabolic Panel	<b>LAB3791</b>
CBC with Differential (Manual if Auto Fails)	<b>LAB210</b>
Reticulocyte Count	<b>LAB296</b>

**To order CMA and chromosome analysis use the following order:**

Order and Order Set Search

COLORADO GENETICS

Order Sets & Panels (No results found)

Medications (No results found)

Procedures

Name	Type	Frequency	Pref List	Px Code
Colorado Genetics Lab Test	Lab	ONCE	HRH IP FACILITY MISCELLA...	GEN2

**Chromosome analysis, 5-cell chromosome analysis, and FISH:** 2-3mL Na Heparin green.

**CMA:** 2mL EDTA lavender.