

PROVINCIAL LABORATORY SERVICES COMMUNIQUÉ

TO: Pediatricians, Health PEI Labour & Delivery Units, Clinical Educators/Instructors, and Health PEI Hospital Laboratories
FROM: Clinical Chemistry Services
DATE: June 1, 2015
RE: **NEW PERINATAL DRUG TESTING SERVICES – MECONIUM & HAIR**

Toronto MotherRisk Drug Testing Laboratory (MDTL) at the Hospital for Sick Children suspended all non-research operations on March 5th 2015. The United States Drug Testing Laboratories Inc. (USDTL) has been selected as an interim provider.

USDTL is a CLIA-certified drug testing lab with particular focus areas Perinatal and Forensic Drug Testing. USDTL is inspected and accredited by both CAP in Forensic Drug Testing and by the State of New York as a Forensic Laboratory.

Drug tests are available for meconium and hair – see Tables 2 and 3.

- Fees are indicated in Canadian dollars (CD\$) inclusive of currency exchange.
- Please note that services are not identical to those previously available from MDTL. The comparison of USDTL and MDTL test services is presented in Table 1 to assist in the selection of tests.
- All USDTL tests require a Chain of Custody. Chain of custody documents and instructions will be provided by the lab.
- Specimen collection instructions and containers will be provided by the lab.

Attachments:

- Table 1 – Comparing New Offerings to Previous Offerings
- Table 2 – Drug Panel Constituents
- Table 3 – Perinatal Meconium and Newborn Hair Tests Offered
- Meconium Collection Instructions
- Hair Collection Instructions

FOR MORE INFORMATION PLEASE CONTACT:

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HEALTH PEI LABORATORY MEDICINE SERVICES NEW PERINATAL DRUG TESTING SERVICES: MECONIUM AND HAIR

Table 1: Comparing New Offerings to Previous Offerings

USDTL Panel	MotheRisk Comparables - MECONIUM
5-Drug Panel (\$200.00)	Standard Neonatal Drug Screen (Amphetamines, Cocaine, Opioids) + THC, PCP (\$295.00)
7-Drug Panel (\$225.00)	Standard Neonatal Drug Screen (Amphetamines, Cocaine, Opioids) + THC, PCP, Methadone, and Barbiturates (\$400.00)
9-Drug Panel (\$250.00)	Standard Neonatal Drug Screen (Amphetamines, Cocaine, Opioids) + THC, PCP, Methadone, Barbiturates and Benzodiazepines (<u>Propoxyphene extra in USDTL Panel</u>) (\$452.50)
12-Drug Panel (\$280.00)	Standard Neonatal Drug Screen (Amphetamines, Cocaine, Opioids) + THC, PCP, Methadone, Barbiturates, Benzodiazepines, Meperidine and Oxycodone (<u>Propoxyphene, Tramadol extra in USDTL Panel</u>) (\$557.50)
13-Drug Panel (\$300.00)	Standard Neonatal Drug Screen (Amphetamines, Cocaine, Opioids) + THC, PCP, Methadone, Barbiturates, Benzodiazepines, Meperidine and Oxycodone (<u>Propoxyphene, Tramadol, Buprenorphine extra in USDTL Panel</u>) (\$557.50)

Table 2: Drug Panel Constituents

Drug	Drug Panels:									
	5	7	9	10	12	13	14	15	16	17
Amphetamines	●	●	●	●	●	●	●	●	●	●
Cannabinoids	●	●	●	●	●	●	●	●	●	●
Cocaine	●	●	●	●	●	●	●	●	●	●
Opiates	●	●	●	●	●	●	●	●	●	●
Phencyclidine (PCP)	●	●	●	●	●	●	●	●	●	●
Methadone		●	●	●	●	●	●	●	●	●
Barbiturates		●	●	●	●	●	●	●	●	●
Benzodiazepines			●	●	●	●	●	●	●	●
Propoxyphene			●	●	●	●	●	●	●	●
Oxycodone				●	●	●	●	●	●	●
Meperidine					●	●	●	●	●	●
Tramadol					●	●	●	●	●	●
Fentanyl							●	●	●	●
Sufentanil							●	●	●	●
Ketamine								●	●	●
Buprenorphine						●			●	●
Zolpidem										●

**HEALTH PEI LABORATORY MEDICINE SERVICES
NEW PERINATAL DRUG TESTING SERVICES: MECONIUM AND HAIR**

Table 3: Perinatal Meconium and Newborn Hair

	Meconium ¹	Newborn Hair ¹
5-Drug Panel ²	\$200.00	\$190.00
7-Drug Panel ²	\$225.00	\$205.00
9-Drug Panel ²	\$250.00	\$275.00
10-Drug Panel ²		
12-Drug Panel ² ,	\$280.00	
13-Drug Panel ²	\$300.00	
14-Drug Panel ²		
15-Drug Panel ²		
16-Drug Panel ²		
17-Drug Panel ²		
Phosphatidylethanol (PEth) ³	\$190.00	
5-Drug Panel + PEth ³	\$280.00	
7-Drug Panel + PEth ³	\$310.00	
9-Drug Panel + PEth ³	\$325.00	
12-Drug Panel + PEth ³	\$350.00	
13-Drug Panel + PEth ³	\$400.00	
Cotinine	\$95.00	

1 Includes confirmation of positives

2 Refer to Table 2 for Panel Constituents

3 Phosphatidylethanol (PEth) is a direct biomarker of ethanol

Meconium Collection Instructions

The maximum window of drug exposure will be achieved by collecting and pooling all meconium passed during the postnatal period. Because meconium is heterogeneous and drugs do not appear to diffuse throughout the entire meconium mass, the pooling of multiple passings of meconium is highly encouraged until the milk stool appears. Three grams (1 teaspoon) of meconium are necessary for maximum sensitivity. Smaller amounts can be analyzed, but with a resulting reduction in sensitivity and/or the window of drug exposure. For your convenience, there are five non-absorbent polyethylene diaper liners for multiple collections until milk stool appears.

Important: Avoid any contact of ethanol liquid or vapor with the meconium. Meconium specimens for FAAE analysis (EtOH) should be refrigerated and protected from light until they are ready to be shipped. Maximum sensitivity is achieved when specimens are shipped in the frozen state.

1. Strategically place a liner in the diaper so as meconium is passed, it collects on the liner instead of the diaper.
Collect by transferring the meconium from the diaper liner to the collection container using the spatula provided. (If collection supplies are not available, a nonsterile, screw-top urine container and wooden tongue depressor may be used.)



Seal properly placed

2. Place name and I.D. number on the Custody and Control Form and meconium container.
3. Document each separate collection with a collector signature and date/time of collection on the Custody and Control form. Be sure to continue collecting specimen into the same collection container until milk stool appears. **Verify that the container ID# and the ID# on the form match before each collection.**
4. When collection is completed, place the bar-coded, tamper evident seal (from the bottom of the form) over the top of the lid, sealing the matching meconium container. Initial and date the seal.
5. Mark the meconium box on the form and (5a) select all test(s) that have been ordered.
6. Complete and sign the form.
7. Place the top copy of the completed Custody and Control form in the large pouch of the plastic specimen bag provided. Place the meconium container in the small pouch of the specimen bag, and seal the bag.
8. Transport specimen and Custody and Control Form to the Laboratory as soon as possible.

FORENSIC NEWBORN DRUG TESTING CUSTODY AND CONTROL FORM						
United States Drug Testing Laboratories, Inc. 1700 S. Mount Pleasant Street / Des Moines, IA 50318 Main: 567-375-0770 / www.usdtl.com / Fax: 567-375-0775						
CONTROL # 4342001						
<table border="1"> <tr> <th>PATIENT / DONOR</th> <th>CLIENT</th> </tr> <tr> <td>Name</td> <td rowspan="2"> N031508ON IN-COMMON LABS NORTH YORK ON </td> </tr> <tr> <td>ID # 2</td> </tr> </table>		PATIENT / DONOR	CLIENT	Name	N031508ON IN-COMMON LABS NORTH YORK ON	ID # 2
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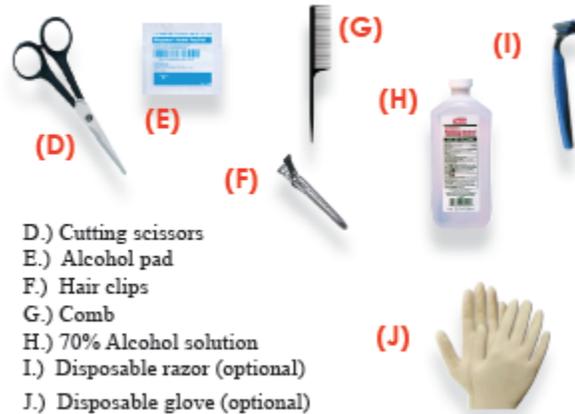
Hair Collection Instructions

Materials provided by USDTL:



- (A) Plastic specimen bag
 (B) Envelope with security seal
 (C) Custody and Control (COC) Form
 (test subject ID number, date of collection, date and signature of sample collector must be completed at the time of collection.)

Materials that must be provided by the collector or collecting facility:



- D.) Cutting scissors
 E.) Alcohol pad
 F.) Hair clips
 G.) Comb
 H.) 70% Alcohol solution
 I.) Disposable razor (optional)
 J.) Disposable glove (optional)

PLEASE NOTE: The directions below are for both newborn and older hair collection.

For Hair Longer than 1.5 inches:

1. The ideal site for collection is the top of the back of the head, the crown or vertex area. In order to make the collection less apparent, isolate a section of hair above the area to be sampled, secure with a hair clip. Using a rat tail comb, select a section of hair to be clipped with cutting shears at scalp level. This section of hair should include approximately 200 strands, an amount equal to that on the USDTL hair sample collection card. If the client has thin hair, multiple collections may be used. After clipping, place the root end of the hair at the vee section of the collection foil. Fold the foil inward several times to secure the hair in the foil. Do not fold the collection foil lengthwise. Fold and cinch foil and place foil inside the envelope. (Continue on to step 4 chain of custody information.)

For Hair Shorter than 1.5 inches:

2. Collect smaller amounts of hair from multiple sites around the head. Fold the collection foil upward on all 4 sides to form a tray for collection of the multiple shorter samples. When a sample volume equal to that on the USDTL hair sample collection card is obtained, fold the foil inward to secure the hair forward shipment. (Continue on to step 4 chain of custody information.)
3. Body hair is an acceptable alternative when scalp hair is not available or has been chemically treated.
Note: Body hair cannot be mixed with head hair. Fold the collection foil as mentioned in the previous section, using cutting shears, place collected samples in the tray until a volume equal to that on the USDTL hair sample collection card is achieved. If the body hair volume is not sufficient, hair from the arms or legs may be collected with a disposable razor.
4. Seal the envelope with the red security seal and initial the seal. Place the chain of custody number sticker from the COC Form on the envelope. The donor (guardian/witness/etc.) reads and initials the appropriate area on the envelope, then dates, prints and signs their name on the COC Form. The collector does the same. This initiates chain of custody. Also, be sure to indicate which test(s) you require.
5. In the presence of the donor, place the white copy of the COC Form in the outer pocket of the security bag. Place the envelope in the other pocket of bag. Then seal and initial the bag. The last two copies of the COC Form are to be used at the discretion of the collecting institution.
6. Deliver to the lab as soon as possible.