Meconium Collection Instructions

The maximum window of drug exposure is 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 all meconium has been excreted. 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 all meconium has been excreted. The red tamper-evident seal and absorbent pad are optional supplies for use if needed.

Important: Avoid any contact of ethanol liquid or vapor with the meconium. Meconium specimens for FAEE 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. To report out a positive FAEE result, the laboratory must verify that the specimen was collected less than 18 hours from the time of birth. If the final time of collection is greater than 18 hours from time of birth, the specimen will be rejected for FAEE testing, and the following comment will be added to the specimen report: “Not suitable for FAEE testing due to delayed specimen collection.”

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.)

2. Place name and I.D. number, or newborn ID sticker, on the Custody and Control Form and collection container. Enter date of birth and time of birth.

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 all meconium has been excreted. Verify that the container ID# and the ID# on the form match before each collection.

4. When collection is completed, close and latch the lid. Place the bar-coded, tamper-evident seal (from the bottom of the Custody and Control form) over the top of the lid, opposite the latch and hinge (Fig. 1). The collection container should be sealed so that opening the lid would break the seal, indicating tampering. Do NOT place the seal over the container latch or hinge. Failure to properly place a tamper-evident seal over the lid will result in a rejected specimen. 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. Place the specimen bag in the box, then place the box in a courier overwrap.

9. Contact your courier for pick-up.