Instructions for Collecting, Handling & Shipping of Prenatal Specimens

When prenatal testing is desired, please contact the laboratory to speak to a laboratory director PRIOR to sending the specimen to discuss the specifics of the case. This will ensure prompt processing and timely turn around. Laboratory directors can be reached directly at 720-777-0512 or 720-777-0517

Specimen Identification: Please put full name and date of birth on each specimen as it is drawn. Unlabeled specimens will not be processed.

Test Orders: A completed order form must accompany all specimens. Include a separate test order form for each person being tested or specimen type, including the signed consent form for patient, parent or guardian. Each specimen needs to be accompanied by the Prenatal Consent form, available on the website.

Samples should be shipped after collection as soon as possible. Ship samples for arrival at Children's Hospital Colorado on Monday through Thursday. Our recommendation is to use FedEx or UPS for shipping and obtain a tracking number to ensure safe delivery. Samples that are received on a Friday afternoon, Saturday, Sunday or before a major holiday will not be processed until the next business day. If samples need to be stored in your laboratory prior to shipping, they should be stored at room temperature for no more than 72 hours.

Specimen shipping address:

Children's Hospital Colorado  
Attn: Clinical Laboratory – Molecular Genetics Laboratory  
13123 E 16th Ave, Rm. B0200  
Aurora, CO 80045

Maternal Cell Contamination Study (MCC): We test for maternal cell contamination with all prenatal testing. If a fetal sample is contaminated with maternal cells, interpretation will be inconclusive. Please provide a maternal blood sample, 2–3 ml in an EDTA (purple top) tube, either before or with the fetal sample. Send a separate test order form for the maternal sample. If a maternal DNA sample is already stored in our laboratory, please contact us to ask if we need an additional specimen.

Amniotic Fluid – Direct: Please establish a cell culture before sending direct fluid; maintain the cell culture as a backup until results are reported. If the direct sample size is too small, results will be reported on the cell culture. For second trimester samples, send two (2) samples of direct amniotic fluid, 15–20 ml each, in sterile, securely capped plastic tubes. For third trimester samples, send a total of 45–50 ml of direct fluid. Transport promptly at room temperature.

Amniotic Fluid – Cell Culture: Send cultured amniocytes at room temperature: Two T25 flasks, filled with media for shipment. Please continue to maintain the cell culture as a backup until results are reported.

CVS – Direct: Please establish a cell culture before sending direct tissue; maintain the cell culture as a backup until results are reported. If the direct sample size is too small, the results will be reported on the cell culture. Direct CVS specimen: At least 10–15 mg of tissue in a sterile medium in a sterile, securely capped plastic container or centrifuge tube. Clean the tissue and transport promptly at room temp.
CVS – Cell Culture: Send cultured cells at room temperature: Two T25 flasks, filled with media for shipment. Please continue to maintain the cell culture as a backup until results are reported.

Missing Paperwork Policy: For test order forms with missing or incomplete answers (e.g., absent or unsigned consent forms or inadequate billing information), our policy is to extract DNA and wait for paperwork before running the test.