Canadian Blood Services in Edmonton will refer samples for fetal genotyping (by amniocyte DNA) to the Blood Center of Wisconsin Molecular Diagnostics Lab in Milwaukee.

Submit specimens to Canadian Blood Services, Edmonton. Do NOT send specimens directly to Blood Center of Wisconsin.

High Risk Maternal Fetal Clinic:
1. Testing Criteria for Fetal Genotyping
Fetal genotyping will be provided in cases where:
- The mother has an antibody capable of causing hemolytic disease of the fetus/newborn (HDFN), AND
- The father is heterozygous for the corresponding antigen (or unknown), AND
- There has been a previous fetus/newborn affected by HDFN, OR
- The antibody is anti-K, regardless of titre, OR
- Amniocentesis is being performed for another indication (i.e. advanced maternal age) even if the mother’s antibody titre is at a non-critical level.

2. Complete Blood Center of Wisconsin Molecular Diagnostic Lab requisition - indicate on requisition to: Send copy of report and invoice to: Prenatal Laboratory, Canadian Blood Services 8249-114 Street, Edmonton, AB T6G 2R8.

3. Complete CBS Laboratory requisition (LL4527 – Perinatal Follow-up Testing for Red Blood Cell Serology) – indicate on requisition “For Fetal Genotyping. Keep specimens at room temperature”.

4. Notify CBS Edmonton by scanning and e-mailing the completed Blood Center of Wisconsin Molecular Diagnostic Lab requisition to perinatal@blood.ca. Indicate the expected date of sample collection. Notifications can also be via telephone at (780) 431-8759 or toll-free at 1-866-258-8889.

5. Collect specimens:

Mother:
- 7 – 15 mL amniotic fluid in sterile container
- 1 X 7mL EDTA whole blood (lavender/pink top)

Ensure specimen labelling matches information on requisition. Keep specimens at room temperature.

6. Submit specimens and requisition(s) as soon as possible (by cab or courier) to:

Prenatal Laboratory
Canadian Blood Services
8249 - 114 Street
Edmonton, AB T6G 2R8
(780) 431-8759

Specimens must be received at CBS Edmonton Monday - Thursday before 1200h for shipment to Wisconsin that day. Specimens received later will be sent the following Monday (no Saturday or Sunday shipments). Delay in sending samples may impair the ability of the laboratory to obtain viable cells from the amniotic fluid for testing.