Canadian Blood Services
BLOOD
PLASMA
STEM CELLS
ORGANS
& TISSUES

Winnipeg, MB
Diagnostic Services

Recommended Testing Perinatal Guidelines

Canadian Blood Services provides screening of pregnant women for blood type and red blood cell antibodies under a program funded by Manitoba Ministry of Health. This screening provides information to assist physicians, midwives and nurse practitioners in ensuring the appropriate management of a pregnancy for both the mother and baby.

CLINICAL SCENARIO	SAMPLE SUBMISSION TIMELINES
First Pregnancy ABO and Rh(D) typing Red Cell Antibody Screen	Initial visit and at 26-28 weeks gestation
Rh positive – previous report on file – antibody screen negative ABO and Rh(D) typing Red Cell Antibody Screen	Initial visit
Rh negative – antibody screen negative ABO and Rh(D) typing Red Cell Antibody Screen	Initial visit and at 26-28 weeks gestation (sample to be collected prior to RhIG injection)
Clinically significant antibodies detected ABO and Rh(D) typing Red Cell Antibody identification / exclusions Titration	Maternal specimens are requested monthly for antibody titration and identification of other clinically significant antibodies.
Mothers who have clinically significant antibodies with critical titres ABO and Rh(D) typing Red Cell Antibody identification / exclusions	A clinically significant antibody will no longer be titered monthly once it has reached a critical value of '16'. If the clinically significant antibody identified is anti-K, titration is not required. Detection of anti-K is a critical result regardless of titre. Maternal specimens will be requested monthly for exclusion of other clinically significant antibodies
Father ABO and Rh(D) typing Red Cell Phenotyping	When the mother has a clinically significant antibody the father's sample is requested for phenotyping to predict the risk of hemolytic disease of the fetus and newborn (HDFN).
Cord / Neonate ABO and Rh(D) typing Red Cell Phenotyping DAT if required	When the mother is Rh negative or has a clinically significant antibody.

Additional samples may be submitted for patients at increased risk of allo-immunization (previous transfusion, fetal trauma or procedure, IV drug use, etc.).