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To Whom It May Concern:

Effective November 1, 2018, Northern Plains Laboratory will be changing their methodology for running prenatal antibody titers. The new methodology may result in titers several dilutions higher than what is currently being reported. The highest antibody titer level reported out will be 1024. These higher results do not imply there is an increased chance of HDFN, but is merely a consequence of the new methodology. Titers will be done using the new methodology on any new pregnancy after November 1st. Any pregnancy which was started with the old methodology will continue with the old method to ensure consistency throughout the pregnancy.

Patients should be considered at a high risk for HDFN when the patient has a history of a previous pregnancy affected by HDFN and/or a two fold increase in patient's titer (e.g. original titer = 8; subsequent titer = 32). At higher titer levels, the degree of fetal cell hemolysis (HDFN) is dependent on the antibody's IgG sub-class, efficiency of placental transfer, the density of fetal red cell antigens, efficiency of clearance of antibody-coated red cells by the fetal spleen etc. Therefore the titer is only an indication that a more direct assessment of the fetus is required. Anti-Kell, in addition to causing hemolysis, may bind to the red cell precursors in the fetal bone marrow, suppressing fetal red cell production therefore causing fetal anemia. Therefore, fetal anemia (HDFN) may occur at lower Kell titer levels.

When the paternity of the baby can be established, the father's phenotype for the corresponding antigen should be determined.

Dr. Jared Schmidt, MD