

DATE:	2021 October 18
TO:	Edmonton, North Zone, Central Zone (excluding Hanna, Drumheller, and Three Hills)
FROM:	Genetics and Genomics (G&G), APL
RE:	Requirement for ultrasound operators to have certification to assess nasal bone for first trimester prenatal screening

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Key Message

- To complete a provincial standardized approach within First Trimester Screening, Fetal Medicine Foundation (FMF) certification for nasal bone assessment will be required for ultrasound operators performing ultrasounds for first trimester prenatal risk assessment.

Background

- Historically, first trimester prenatal risk assessment included maternal age, nuchal translucency, fetal heart rate, and serum biochemistry measuring free beta-hCG and pregnancy-associated plasma protein.
- On March 1, 2021 nasal bone status was added to first trimester prenatal risk assessment for aneuploidy for screens performed by the Newborn Metabolic Screening and Biochemical Genetics Laboratory located in Edmonton. Currently, nasal bone status is only included in the first trimester risk assessment if the ultrasound operator has valid FMF certification and nasal bone information is included on the requisition.
- Inclusion of nasal bone status in first trimester prenatal risk assessment for singleton and twin pregnancies improves the detection rate for trisomy 21, and decreases the false-positive rate. Absent or hypoplastic nasal bone is associated with an increased risk for trisomy 21.

How this will impact you

- Effective October 25, 2021 first trimester prenatal screen risk assessments will be cancelled if the ultrasound operator is not certified or their certification has expired at the time of ultrasound.

Action Required

- All ultrasound operators performing ultrasounds for first trimester risk assessment must submit a FMF license file with nasal bone certification to the Newborn Metabolic Screening and Biochemical Genetics Laboratory by email to NMSLab@albertaprecisionlabs.ca.
- Fully complete the Maternal Prenatal Screen Requisition including nasal bone status (present/absent/unable to assess).

Effective **October 25, 2021**

Questions/Concerns

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- Laboratory Genetic Counsellors North, 780-407-7907

Approved by

- Dr. Dennis Bulman, Medical/Scientific Director, Genetics & Genomics, APL
- Dr. Carolyn O'Hara, Chief Medical Laboratory Officer (Interim), APL