
Date: September 23, 2019
To: All Zones: Physicians, Nursing Managers, Nursing Educators, Midwives, Laboratory Directors and Managers, Diagnostic Imaging Directors and Managers
From: Alberta Public Laboratories (APL)
Re: Edmonton University of Alberta Hospital, Guideline Update Second Trimester Maternal Serum Alpha-Fetoprotein (MS-AFP) for Neural Tube Defect Screening

PLEASE POST OR DISTRIBUTE AS WIDELY AS APPROPRIATE

Key Messages:

- Effective September 23, 2019 the Edmonton University of Alberta Hospital Laboratory will:
 - Restrict MS-AFP screening for fetal neural tube defects to Society of Obstetricians and Gynaecologists of Canada (SOGC) clinical indications.
 - Discontinue out-of-date and incorrect second trimester maternal prenatal screen requisitions in Alberta.

Background:

- Currently, MS-AFP screening for fetal neural tube defects in Alberta is routinely performed in the second trimester regardless of clinical indications or requisition received.
- The preferred test for prenatal detection of neural tube defects is a second trimester detailed anatomic ultrasound at 18-22 weeks, rather than a MS-AFP lab test (SOGC Fetal Neural Tube Defects Clinical Practice Guideline, Oct 2014)

Why this is important:

- MS-AFP screening will only be available to pregnant women with confirmed or suspected neural tube defect by ultrasound, pre-pregnancy body mass index (BMI) of ≥ 35 kg/m² or rural/remote regions that lack access to a timely, quality second trimester detailed anatomic ultrasound (SOGC Fetal Neural Tube Defects Clinical Practice Guideline, Oct 2014).
- Missing demographic and clinical information on out-of-date or incorrect requisitions delays sample processing/reporting and is required to accurately interpret screen results.

Action Required:

- Request all second trimester prenatal screens (QUAD and MS-AFP) on the current AHS Maternal Prenatal Screen Requisition and clearly note the clinical indication for MS-AFP screening in the space above test request. Otherwise, request will be cancelled. This requisition can be obtained from the APL or DynaLIFE websites or at <https://www.albertahealthservices.ca/fm-CH-1247.pdf>.

Additional Information:

- Ultrasound service description can be found at <http://www.topalbertadoctors.org/cpgs/0254368>

Inquiries and feedback may be directed to:

Genetic counsellors, University of Alberta Hospital Laboratory at 780-407-7907

This bulletin has been reviewed and approved by:

Dr. Carolyn O'Hara, Interim Chief Medical Laboratory Officer, Alberta Public Laboratories