

DATE:	10 June 2024
TO:	All Zones: All Healthcare Professionals and Providers
FROM:	Clinical Biochemistry, Alberta Precision Laboratories (APL)
RE:	Change to Adult Female Reference Intervals for Cortisol Urine, 24 Hour

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Key Message

- Effective, Tuesday June 11, 2024, new sex partitions will be implemented provincially for Cortisol Urine, 24 hour reference intervals (see below table).

Sex	Current (nmol/day)	New (nmol/day)
Female	<230	<160
Male	<230	No change
Gender X/Unknown	<230	No change

Background

- A subset of female patients diagnosed with Cushing's syndrome/disease by endocrinologists were found to have Cortisol Urine, 24 hour concentrations within the current reference interval.
- A literature and provincial data review of outpatient and community urine cortisol results identified that there is lower excretion in adult females compared to males, supporting the use of sex-partitioned reference intervals.
- Revised female Cortisol Urine, 24 hour reference intervals were calculated using the provincial dataset.
- Lowering the female reference interval is expected to flag an additional ~2.0-4.0% of patients as being elevated.

Action Require

- Be aware that some female patients with results previously within the reference interval will now be reclassified above the reference interval.

Questions/Concerns

- Dr. Josh Raizman, Clinical Biochemist, APL, josh.raizman@aplabs.ca or 780-718-2402.
- Dr. Dennis Orton, Clinical Biochemist, APL, dennis.orton@aplabs.ca or 403-770-3219.

Approved by

- Dr. Kareena Schnabl, Clinical Biochemistry Section Chief, North Sector, APL
- Dr. Allison Venner, Clinical Biochemistry Section Chief, South Sector, APL
- Dr. Michael Mengel, Medical Director, North Sector, APL
- Dr. Dylan Pillai, Medical Director, South Sector, APL

Effective September 1, 2023, APL has become the sole provider of all public lab services in Alberta. As a result, community lab services formally provided by DynaLIFE Medical Labs will become the responsibility of Alberta Precision Labs (APL). This change impacts all zones.