

## DIAGNOSTIC SERVICES / CLINICAL BIOCHEMISTRY

## Change to Parathyroid Hormone (PTH) Reference Range

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**Background Information:**

- Parathyroid hormone (PTH) concentration is routinely measured in the diagnosis and management of bone and kidney diseases.
- PTH concentrations vary significantly depending on vitamin D status.
- Vitamin D deficiency occurs frequently in the general population and is the most common cause of minimally elevated PTH.
- Vitamin D deficiency is common in Manitoba and does not require confirmatory vitamin D level testing.
- Repeat testing of PTH & calcium levels for patients with minimally elevated PTH & normal serum calcium & creatinine should be done after 3 – 6 months of vitamin D supplementation.

**Clinical Testing Change:**

- A new method-specific reference range for the Elecsys® PTH assay, determined in specimens from 307 healthy adults and stratified by 25-OH vitamin D status has recently been published.
- This is the same method used by Shared Health laboratories.
- The reference range for PTH is changed from 7 – 50 ng/L to **17 – 60 ng/L** effective March 16, 2020
- Results will also be reported with the comment “Reference values are based on healthy, normocalcemic, vitamin D-replete individuals with normal renal function.”

**Reference:**

Yalla N, Bobba G et al. Parathyroid Hormone Reference Ranges in Healthy Individuals Classified by Vitamin D Status. J Endocrinol Investig 2019, 42:1353-1360

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