

Date February 21, 2025

DIAGNOSTIC SERVICES

Alkaline Phosphatase (ALP) Reference Intervals Update

Date effective: March 3, 2025

Effective March 3, 2025, the reference intervals for plasma/serum Alkaline Phosphatase (ALP) tests performed at Shared Health laboratories across province will be revised as a part of ongoing quality improvement.

Change:

Revised reference intervals are evidence-based and supported by literature. Pediatric reference intervals are being updated in accordance with the Canadian Laboratory Initiative on Pediatric Reference Intervals (CALIPER). Adult reference intervals are literature-based and have been verified in our local population where possible.

There is no change in testing methodologies. Some patients may reclassify depending on their sex and age reference interval partition.

New			Current		
All Shared Health Sites				WRHA & Westman	Rural
Age	Male	Female	Age	Male & Female	
0 – 14 d	83 - 248 U/L		0 – 12 m	117 – 353 U/L	140 – 424 U/L
15d – 12 m	122 – 469		1 – 10 y	70 – 258	84 – 310
1 – 9 y	142 - 335		11 – 16 y	59 – 422	71 – 506
10 – 12 y	129 - 417		≥ 19 y	30 - 120	36 - 144
13 – 14 y	116 - 468	57 - 254			
15 – 16 y	82 - 331	50 - 117			
17 – 18 y	55 – 149	35 - 104			
≥ 19 y	40 - 129	35 – 104			

ALP results below 30 IU/L will be reported with the following comment:

“Patients with low alkaline phosphatase levels: A low level can occur in various medical conditions and may be a marker for hypophosphatasia, a now potentially treatable disorder of bone mineralization. For further information please contact the metabolic geneticist on call through HSC paging (787-2071).”

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