

<b>DATE:</b>	4 March 2024
<b>TO:</b>	All Healthcare Professionals in Alberta
<b>FROM:</b>	Clinical Biochemistry, Alberta Precision Laboratories (APL)
<b>RE:</b>	<b>Target Range Change for Blood Lead Level (Pediatrics)</b>

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### Key Message

- The target range for Lead Level, Blood in patients up to 6 years of age is changing to <0.17 umol/L (from <0.24 umol/L).

<i>Age (years)</i>	<i>Current Target Range (umol/L)</i>	<i>New Target Range (umol/L)</i>
< 6	<0.24	<0.17

### Background

- The current target range for pediatric patients is based on the United States (US) Centers for Disease Control (CDC) recommendations. The CDC now recommends a reference value of <0.17 umol/L (3.5 ug/dL).
- As per the CDC website, this level is based on the 97.5<sup>th</sup> percentile of the blood lead values among US children ages 1-5 years from the 2015-2016 and 2017-2018 National Health and Nutrition Examination Survey (NHANES) cycles. Children with blood lead levels at or above the blood lead reference level of 0.17 umol/L represent those at the top 2.5% with the highest blood lead levels.

### How this will impact you

- The new lower blood lead reference value means that more children could be identified as having lead exposure.

### Action Required

- Be aware of changes to the target range for Lead Level, Blood orders.

**Effective**      March 6, 2024

### Questions/Concerns

- Dr. Penny Colbourne, Clinical Toxicologist, North Sector, APL, 780-407-4729, [penny.colbourne@aplabs.ca](mailto:penny.colbourne@aplabs.ca)

### Approved by

- Dr. Kareena Schnabl, Section Chief Biochemistry, North Sector, APL
- Dr. Michael Mengel, North Sector Medical Director, APL



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## References

<https://www.cdc.gov/nceh/lead/data/blood-lead-reference-value.htm>

Please note that any references to capillary blood lead testing is not applicable to Alberta.

For interest the conversion factor for Lead is:  $\text{ug/dL} \times 0.0483 = \text{umol/L}$

*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.*