



Client Communication

Update of the Blood Lead Reference Range

Effective 07/18/2022, CPL will adjust the reference range for blood lead to <3.5 ug/dL for children less than 6 years of age and, as a part of this transition, will report blood lead results to a precision of one decimal point. The reference range adjustment is based on communications to the medical community from the US Centers for Disease Control and Prevention (US CDC) as of October 2021. As background to that guidance, CDC notes:

- No safe blood lead level (BLL) in children exists. Even low levels cause harm.
- The updated reference range is based on the 97.5th percentile of blood lead distribution in U.S. children aged 1–5 years from National Health and Nutrition Examination Survey (NHANES) data set (2015–2016 and 2017–2018 survey cycles).
- The updated reference range to <3.5 ug/dL provides additional opportunity to address low-level exposures and public health disparities in lead exposure in children.

CDC recommends that the reduced threshold be used to empower public health and practitioners to determine whether medical or environmental follow-up actions should be initiated, and it should be used to prioritize communities with the greatest need for primary prevention of exposure and adverse impact.

Sources of lead exposure in the US continue to be lead-based paint, contaminated soil, and certain municipal water and plumbing systems. Additionally, this may be associated with certain toys, candies imported from other countries, home remedies, jobs and hobbies involving lead-based products or close proximity to airports with exposure to aviation fuel. The CDC provides extensive guidance on exposure reduction (<https://www.cdc.gov/nceh/lead/faqs/lead-faqs.htm>).



Client Communication

Affected Order Codes

Assay	Order Code	Previous Reference Range	New Reference Range*
Blood Lead, Capillary	4238	<5 ug/dL	<3.5 ug/dL, age <6 years <5.0 ug/dL, age >=6 years
Blood Lead, Venipuncture	4239	<5 ug/dL	<3.5 ug/dL, age <6 years <5.0 ug/dL, age >=6 years
Blood Lead, Industrial	4240	Lead component: <5 ug/dL	Lead component: <3.5 ug/dL, age <6 years <5.0 ug/dL, age >=6 years

* Note: Results reported to single decimal place with change to reference ranges (XX.x ug/dL).

References:

<https://www.cdc.gov/nceh/lead/advisory/acclpp/actions-blls.htm>

<https://www.cdc.gov/mmwr/volumes/70/wr/mm7043a4.htm>