

Date: April 30, 2019

Test Update: New Ranges and Interpretation for Elevated Lead in Adults and Children

Dear Regional Pathology Services Clients,

In compliance with CDC (Centers for Disease Control and Prevention) and The National Institute for Occupational Safety and Health (NIOSH) recommendations, effective Monday, April 22, the **new cutoff normal concentration for lead in adults (over 16 year old) is 5 µg/dL (previously stated as 25 µg/dl)**. The critical concentration of lead in blood for adults is considered **45 µg/dl (previously 70 µg/dl)**. At this concentration, a call is warranted and the patients will require repeat testing within 48h and corresponding intervention (e.g. chelation).

Interfaced clients: will automatically update with these new reference ranges.

Although there are no changes regarding cutoff concentrations of lead in children (age 16 and below), UNMC laboratory has updated the references regarding interpretation of laboratory results for lead in children and the references for medical intervention in the case of elevated lead results in children:

Newman N, Binns HJ, Karwowski M, Lowry J, and the Pediatric Environmental Health Specialty Unit (PEHSU) Lead working group: https://www.pehsu.net/_Library/facts/medical-mgmt-childhood-lead-exposure-June-2013.pdf

Marissa Hauptman, MD, Rebecca Bruccoleri, MD, Alan D. Woolf, MD. Clin Pediatr Emerg Med. 2017 Sep; 18(3): 181–192. doi: [10.1016/j.cpem.2017.07.010](https://doi.org/10.1016/j.cpem.2017.07.010). PMID: [29056870](https://pubmed.ncbi.nlm.nih.gov/29056870/)
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5645046/pdf/nihms904604.pdf>

If you would like to discuss this further with your client representative please contact client services at 402-559-6420 and ask to speak with one of the client coordinators.