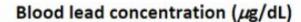
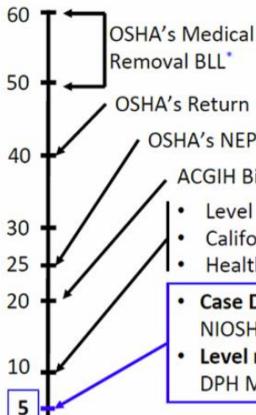
Reference Blood Lead Levels (BLLs) for Adults in the U.S.

Slide updated 10/17/2017





- OSHA's Return to Work
  - OSHA's NEP lead (2008)

ACGIH Biological Exposure Index (2017)

- Level for BLL testing every 6 months (AOEC, 2007)
- California DPH Medical Guidelines (2009)
- Healthy people 2020, OSH Objective 7 (2010)
- Case Definition for an elevated BLL: CSTE (2015), ABLES/ NIOSH/CDC (2015), CDC Nationally Notifiable Condition (2016)
- Level not to exceed during pregnancy: AOEC (2007), California DPH Medical Guidelines (2009), CDC (ACCLPP, 2010)

2013-2014 average BLL among adults (National Report on Human Exposure to Environmental Chemicals)

\*The OSHA Lead Standards state that the examining physician has broad flexibility to tailor protections to the worker's needs.



## Source Documents for Reference Blood Lead Levels – as posted on the NIOSH web page, April 17, 2018

https://www.cdc.gov/niosh/topics/ables/ReferenceBloodLevelsforAdults.html

- 1. Occupational Safety and Health Administration (OSHA). Lead Standards
- 2. American Conference of Governmental Industrial Hygienists (ACGIH). Biological Exposure Indices
- 3. OSHA Instruction: National Emphasis Program (NEP) on Lead

"Inspections will also be conducted in establishments where reported employee blood lead levels were at or above 25 µg/dL"

- 4. Association of Occupational and Environmental Clinics (AOEC). Medical Management Guidelines for Lead-Exposed Adults, Revised 04/24/2007. CSTE Medical Management Guidelines Added October 2013, see Pages 16-17
- 5. Kosnett MJ et al. Recommendations for Medical Management of Adult Lead Exposure.
- California Department of Public Health (CDPH) Medical Guidelines for the Lead-Exposed Worker
- 7. Department of Health and Human Services. Healthy People 2020 Occupational Safety and Health objective 7 (OSH-7) and operational definition
- 8. <u>Council of State and Territorial Epidemiologists (CSTE) Position Statement 15-EH-01.</u> Public Health Reporting and National Notification for Elevated Blood Lead Levels.
- 9. Centers for Disease Control and Prevention(CDC), National Institute for Occupational Safety and Health (NIOSH), <u>Adult Blood Lead Epidemiology and Surveillance (ABLES) case definition for an elevated blood lead level</u>
- 10. CDC. National Notifiable Diseases Surveillance System (NNDSS). Nationally Notifiable Non-Infectious Conditions. Lead, Elevated Blood Levels 2016

  Case Definition
- 11. CDC. Advisory Committee on Childhood Lead Poisoning Prevention (ACCLPP): <u>Guidelines for the Identification and Management of Lead Exposure in Pregnant and Lactating Women</u>

These guidelines recommend follow-up activities and interventions beginning at blood lead levels (BLLs)  $\geq$  5 µg/dL in pregnant women. The essential activity in management of pregnant women with BLLs  $\geq$ 5 µg/dL is removal of the lead source, disruption of the route of exposure, or avoidance of the lead-containing substance or activity.

- 12. National Toxicology Program (NTP). Health Effects of Low-level Lead Evaluation
- 13. CDC. National Report on Human Exposure to Environmental Chemicals. Updated tables, January 2017