PA DOH adopts the lower CDC’s blood lead reference value of 3.5 ug/dl

DATE: January 27, 2022
TO: Health Alert Network
FROM: Keara Klinepeter, Acting Secretary of Health
SUBJECT: PA DOH adopts the lower CDC’s blood lead reference value of 3.5 ug/dl

DISTRIBUTION: Statewide
LOCATION: Statewide
STREET ADDRESS: n/a
COUNTY: n/a
MUNICIPALITY: n/a
ZIP CODE: n/a

This transmission is a “Health Advisory” provides important information for a specific incident or situation; may not require immediate action.

HOSPITALS: PLEASE SHARE WITH ALL MEDICAL, PEDIATRIC, INFECTION CONTROL, NURSING AND LABORATORY STAFF IN YOUR HOSPITAL; EMS COUNCILS: PLEASE DISTRIBUTE AS APPROPRIATE; FQHCs: PLEASE DISTRIBUTE AS APPROPRIATE; LOCAL HEALTH JURISDICTIONS: PLEASE DISTRIBUTE AS APPROPRIATE; PROFESSIONAL ORGANIZATIONS: PLEASE DISTRIBUTE TO YOUR MEMBERSHIP

Summary

• CDC updated its blood lead reference value (BLRV) from 5 µg/dL to 3.5 µg/dL in response to the Lead Exposure Prevention and Advisory Committee (LEPAC) recommendation made on May 14, 2021.
• The BLRV is based on the 97.5th percentile of the blood lead level (BLL) distribution among children 1-5 years old in the U.S. from the two most recent cycles of data (i.e., 2015-2018) from the National Health and Nutrition Examination Survey (NHANES). Thus, based on NHANES data, CDC accepted the LEPAC recommendation to update the BLRV to 3.5 µg/dL.
• No blood lead level is safe. Exposure to lead, even at low levels, can cause intellectual, behavioral, and academic deficits.
• PA DOH adopted the new lower BLRV on January 1, 2022, and is encouraging all county municipal health departments, lead prevention partners, and health care providers to use the lowered reference value of 3.5 ug/dl to determine the blood lead level required for case management and environmental investigation.
• Health care providers should follow CDC’s recommended actions based on the BLL in children with BLLs at 3.5 ug/dl or above. CDC - Lead - Recommended Actions Based on Blood Lead Levels
• This update will likely cause some changes in lead prevention programs, as well as clinicians, laboratories, and caregivers of young children in your communities. We are available to support you in this transition. Please call DOH at 1-877-PA-HEALTH if you have any questions.

Summary

Exposure to lead, even at low levels, can cause intellectual, behavioral, and academic deficits in children. CDC updated its blood lead reference value (BLRV) from 5 µg/dL to 3.5 µg/dL in response to the Lead Exposure Prevention and Advisory Committee (LEPAC) recommendation made on May 14,
2021. PA DOH adopted the new lower BLRV on January 1, 2022, and is encouraging all county municipal health departments and health care providers to follow CDC’s recommended actions based on the BLL in children. CDC - Lead - Recommended Actions Based on Blood Lead Levels.

We also encourage you to inform providers about recommended actions based on blood lead level. The purpose of this Health Alert Network (HAN) Health Advisory is to notify healthcare providers and state and local health departments about this change in reference value and to recommend appropriate follow-up actions.

Background

CDC updated its blood lead reference value (BLRV) from 5 µg/dL to 3.5 µg/dL in response to the Lead Exposure Prevention and Advisory Committee (LEPAC) recommendation made on May 14, 2021. The BLRV is based on the 97.5th percentile of the blood lead level (BLL) distribution among children 1-5 years old in the U.S. from the two most recent cycles of data (i.e., 2015-2018) from the National Health and Nutrition Examination Survey (NHANES). Thus, based on NHANES data, CDC accepted the LEPAC recommendation to update the BLRV to 3.5 µg/dL.

Lead exposure can have serious consequences for children’s health. There is no known safe blood lead concentration; even blood lead levels as low as 5 µg/dL may be associated with decreased intelligence in children, behavioral difficulties, and learning problems. As lead exposure increases, the range and severity of symptoms and effects also increase.

PA DOH adopted the new lower BLRV on January 1, 2022, and is encouraging all county municipal health departments and health care providers to follow CDC’s recommended actions based on the BLL in children with BLLs at 3.5 ug/dl or above. CDC - Lead - Recommended Actions Based on Blood Lead Levels.

Recommendations

- County municipal health departments and health care providers should use the updated lower BLRV of 3.5 ug/dl instead of the previous 5 ug/dl in case management and promote the new BLRV as a way to identify children with BLLs that are higher than most U.S. children’s levels.
- Screening of all Medicaid-enrolled children at ages 12 and 24 months, or at ages 24–72 months if they have not previously been screened.
- A capillary test at 3.5 ug/dl or above should be followed up with a confirmation test within the appropriate time frame based on CDC’s recommendation. A child with two capillary tests at 3.5ug/dl and above and tested within 84 days is considered as having a confirmed elevated blood lead level (EBLL). A child with a venous test at 3.5 ug/dl or above is considered as having an EBLL.
- Healthcare providers or public health officials should refer to CDC - Lead - Recommended Actions Based on Blood Lead Levels or state/local guidelines for appropriate follow-up action.

More information about blood lead testing can be found by visiting—

- CDC’s Lead Poisoning Prevention Program
- CDC’s Lead and Multi-element Proficiency Program
- PA DOH lead information Lead Poisoning (pa.gov) 1-800-440-LEAD

If you have questions about this guidance, please call your local health department or 1-877-PA-HEALTH (1-877-724-3258).
Individuals interested in receiving further PA-HANs are encouraged to register at https://han.pa.gov/.

Categories of Health Alert messages:

- **Health Alert**: conveys the highest level of importance; warrants immediate action or attention.
- **Health Advisory**: provides important information for a specific incident or situation; may not require immediate action.
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This information is current as of January 27, 2022 but may be modified in the future.