



Department of Health and Social Services
William H. Hogan, MSW, Commissioner

Division of Public Health
Ward Hurlburt, MD, MPH, CMO/Director

Editors:
Joe McLaughlin, MD, MPH
Bradford D. Gessner, MD, MPH

3601 C Street, Suite 540
Anchorage, Alaska 99503

<http://www.epi.alaska.gov>

Local (907) 269-8000
24 Hour Emergency (800) 478-0084

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Updated Recommendations on Blood Lead Screening for Medicaid-Eligible Children

Background

Since 1989, Medicaid-eligible children (MEC) have been identified as having an increased risk for lead exposure.¹ Since then, the federal Medicaid Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) Program has required blood lead screening on all MEC at ages 12 and 24 months, or at 36–72 months if the child has not previously been screened.² In 1997, CDC endorsed universal screening of Medicaid-enrolled children unless dependable local data demonstrated the absence of lead exposure in this population.³

In 1997, the Alaska Section of Epidemiology (SOE) published the results of a population-based study involving 967 Medicaid-enrolled children throughout Alaska, which showed that the prevalence of elevated blood lead level (BLL) was very low (0.6%).⁴ The authors concluded that universal lead screening for Alaska's Medicaid-enrolled children is not an effective use of public health resources, and recommended blood lead testing only in children with signs or symptoms of lead poisoning or in children who are suspected to be at high risk of having an elevated BLL.⁴ As a result of this study, Alaska Medicaid's EPSDT regulations have not, until recently (see below), contained blood lead screening guidance.

In 2008, the federal Administration for Children & Families issued a memorandum to their Head Start grantees, which stated that in order to meet the Head Start Program Performance Standards, Head Start programs must ensure that all enrolled children receive a lead toxicity screening as per the federal EPSDT requirements.⁵ If a child's medical provider will not perform a lead screening test, then the Head Start program is required to assist the family in obtaining the test from other community resources.

In 2009, CDC indicated that BLLs have decreased among MEC in some jurisdictions, and therefore called for a new national blood lead screening strategy to account for local variations in risk and disparities. State health officials were urged to recommend targeted lead screening criteria for MEC (Box).¹

Box. CDC's Blood Lead Screening Criteria for Medicaid-Eligible Children:

- Child is suspected by a parent or a health care provider to be at risk for lead exposure
- Child has a sibling or playmate with elevated BLL
- Child is a recent immigrant, refugee, or foreign adoptee
- Child's parent or principal caregiver works professionally or recreationally with lead
- Child has a household member who uses traditional, folk, or ethnic remedies or cosmetics or who routinely eats food imported informally from abroad
- Child's family has been designated at increased risk for lead exposure by the health department because the family meets local risk factors for lead exposure (e.g., such as residence in a designated high-risk zip code or near a known point source)

Revised Alaska EPSDT Regulations

The Alaska Medicaid program has updated its EPSDT screening regulations (effective February 2, 2010) to remain compliant with federal mandates. Regulation 7ACC 110.205 states that EPSDT screening in Alaska must include a lead screening appropriate for age and risk factors. Alaska Medicaid routinely reimburses all claims for lead screening.

Discussion

Based on the available epidemiologic data regarding elevated BLLs in Alaska children,^{4,6} we support CDC's new targeted blood lead screening criteria for Alaska MEC aged <6 years (Box).¹ We also support using these criteria for screening older children and non-MEC in Alaska. We acknowledge that these screening criteria are different than the existing federal EPSDT lead screening requirements for MEC, and make it challenging for Alaska Head Start programs to meet the federal Program Performance Standard for lead screening. The Alaska Medicaid Program's updated EPSDT regulation addresses the need for appropriate BLL screening among MEC, but still allows providers to use clinical discretion and statewide epidemiologic data to determine the appropriateness of lead toxicity screening.

In the contiguous United States, the major sources of lead exposure among children aged <6 years include lead-contaminated dust, deteriorated lead-based paint, and lead-contaminated soil. These exposure sources are uncommon in Alaska, where the primary identified risk factors for exposure include recent immigration from abroad, air gun pellets, and pica.⁶

The SOE Environmental Public Health Program conducts follow-up investigations on all cases of elevated BLLs and will update targeted screening recommendations as new risk factors and trends are identified. The Alaska State Public Health Laboratory now offers blood lead testing on fingerstick blood samples analyzed using inductively-coupled plasma mass spectrometry. This service is provided free of charge for MEC.

Recommendations

1. Providers should follow CDC's updated recommendations for blood lead screening for Alaska MEC aged <6 years (Box); providers should also consider BLL screening in children aged ≥6 years and non-MEC who meet one of these criteria.
2. Providers may submit blood specimens from MEC to the Alaska Public Health Laboratory for BLL analysis. Contact SOE to request blood lead testing materials, instructions, and a shipping kit (call 907-269-8000 during business hours). Alternatively, providers may use another clinical testing laboratory of their choice.
3. Health care providers and laboratories are legally required to report all BLL results that are ≥10 µg/dL.⁷ SOE strongly encourages reporting of *all* BLL results in order to determine where and how frequently testing is occurring statewide, and to monitor trends in BLLs below the 10 µg/dL threshold level.

References

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7. Alaska Conditions Reportable to Public Health. Available at: <http://www.epi.hss.state.ak.us/pubs/conditions/ConditionsReportable.pdf>