IDAHO MEDICAID
CHILDREN'S LEAD SCREENING PROGRAM OF IDAHO
POLICY
LEAD INTERVENTION PROGRAM

Overview of Lead Testing Policy

- Blood lead tests are available by request for any person residing in Idaho, however the focus of testing are Idaho Medicaid eligible children.

- The Provider will bill the Department for blood lead tests performed for eligible Idaho Medicaid participants. The Provider may collect their usual and customary fee from non-Medicaid participants. The Centers for disease Control and The American Academy of Pediatrics recommends that Providers follow the Advisory Committee on Childhood Lead Poisoning Prevention (ACCLPP)[1] recommendations for testing at:
    1. 12 months; and
    2. 24 months;
    3. Or at ages 36-72 months if they have not previously been screened.

- Prior to blood draws, the parent/legal guardian or adult participant must sign a Consent Form ***(Lead Results Report Form: Appendix A and B)***.
    - If the child will be unaccompanied during the screening, the parent/legal guardian must also complete a confirmation of Medicaid eligibility, or a fee will be collected prior to the client's blood screening being completed.

Lead Analysis Training:

- All staff who perform blood lead testing and analysis are trained to use the LeadCare II Analyzer. The initial training includes:
    1. Viewing the LeadCare Training DVD.
    2. Review of the contents of the *LeadCare II User's Guide* and the *Policies & Procedures Manual*.
    3. Maintenance and cleaning of the LeadCare II Analyzer.
    4. Quality control procedures.
    5. Sample collection, identification, and storage.
    6. Sample analysis.
    7. Recording of results.
    8. Troubleshooting and malfunctions.
    9. Customer service access.
    10. Reporting results. Copies of recorded results are to be reported to the Department of Heath and Welfare, Division of Medicaid on a quarterly basis. They are due January 1, April 1, July 1, and October 1.

        Fax to:
        - Medical Care Unit
          Attn: Lead Screening Program
          208-332-7280

[1] Reference: MMWR December 08, 2000/49(RR14); 1-13 Recommendations for Blood Lead Screening of Young Children Enrolled in Medicaid: Targeting a Group at High Risk.

Mail to:

- Lead Screening Program
  3232 Elder St.
  Boise, Idaho 83705

- The initial training is documented on the ***LeadCare II New User Training Checklist: Appendix E***.

- Results of all blood analyzed on the LeadCare Analyzer are recorded in the ***LeadCare Blood Testing System Data Sheet: Appendix D*** and the patient's medical record.

- The *LeadCare II User's Guide* is the final authority on questions related to analysis of blood samples for lead testing.

- Results of capillary tests are provided to the participant or parent immediately after analysis using the designated forms. If testing for another provider, the family physician or provider is sent either by fax or mail a copy of the screening results within one week of testing.

Blood Testing:

- Screening blood tests are done by skin puncture. (A venous sample may be substituted at the request of the parent/participant.) Sites for skin puncture are finger, big toe, heel, or earlobe. The preferred site for infants under 1 year of age is the big toe or heel. The finger is preferred for all other ages. Capillary blood samples are collected in a heparinized, lead-free ESA capillary tube and analyzed immediately.

Laboratory Testing:

- Because the level of concern for childhood lead poisoning is now recognized as 10µg/dL rather than 25µg/dL, the erythrocyte protoporphyrin test is no longer adequate for finding children adversely affected by lead.

- A highly accurate (low bias) method for measuring blood lead is the isotope dilution-mass spectroscopy technique. CDC uses a similar method, inductively coupled plasma-isotope dilution-mass spectroscopy analysis.

- Many clinics now use a protocol where an initial fingerstick sample is taken and the result may be given immediately to the patient and their family. A fingerstick sample result of 10µg/dL or greater should be confirmed by venous testing, but even if not confirmed with venous testing, should be treated as a confirmed case for the purposes of public health reporting, investigation, and response. If follow-up venous testing is done, and the result is less than 10µg/dL, the fingerstick can be disregarded as probable false-positive UNLESS the fingerstick result was greater than 14µg/dL AND a significant amount of time (greater than a few weeks) has elapsed between the fingerstick and the venous sample.

- The Idaho Bureau of Laboratories offers a test for lead, mercury and cadmium in whole blood. This test is not suitable for pediatric patients. Optimal amount of specimen is 1-2 mL, minimum is 0.25 mL. Specimens must be collected in trace

element vacutainers (certified for use in metals determinations) containing anticoagulant agent. The blood must be drawn through a stainless steel needle. If more than one evacuated tube of blood is to be drawn from an individual, the trace metals tube should be drawn second or later. Two blank (empty) containers should be submitted per lot of specimen containers. Handle and store blank containers in an identical manner to specimen containers for testing. Specimens should be stored and transported at ≤4 degrees C. See IATA regulations for shipping specimens.

Sample Results:

- Normal:
  - Sample results of 0-9 µg/dL are considered within normal limits.
    A. Participants are provided a letter of the test results. **(*Lead Normal Result Letter: Appendix F*)**.

- Above Normal:
  - Sample results of 10-14 µg/dL are outside the normal range and require the following:
    A. Participants are provided a letter of the test results (***Above Normal Result Letter: Appendix G***)
    B. It is recommended by CDC Guidelines that all elevated capillary blood lead levels (10µg/dL or greater) will be confirmed by a venous sample.
    C. Blood lead levels of 10µg/dL or greater are reported within three working days to the Public Health District CD/EPI Team for investigation, interview, evaluation, education and follow-up. *(Refer to Elevated Blood Lead Investigation Form* for an example of investigation criteria*).*
    D. The Public Health District will file a report of abnormal results with the Office of Epidemiology and Food Protection via the National Electronic Disease Surveillance System (NEDSS) for each person with an elevated blood lead level (10µg/dL or greater) in accordance with Idaho regulations.
    E. A repeat test in 3-4 months.

  - Capillary sample of ≥ 15 µg/dL requires the same above procedures, as well as the following:
    A. Home visit and environmental analysis by the Public Health District.
       1. Billable under Medicaid.
       2. Requires RN evaluation.
    B. A repeat test in 3-4 months.

Investigating a reported case:

A CD/EPI Nurse and/or environmental health specialist provides follow-up services for all children with blood lead levels of 10µg/dL or greater depending on the levels of abnormality. A home visit with the parents is scheduled as soon as possible with levels ≥ 15. The home environment is inspected for sources of lead. For adults, if occupational exposure is suspected, investigation may involve contact with the employer's occupational health and safety officer. One of the major concerns in adults is whether they may be bringing lead home to their families, especially young children, on their

hands, tools, and clothing. Parents are counseled on interventions including nutrition, personal and household hygiene, and ways to break exposure pathways. Referrals are made for appropriate services needed such as developmental screening, WIC, etc.

Education for people affected by lead and their families:

- A questionnaire is completed to determine exposure sources and risk factors during home visits.
- Housekeeping intervention is provided to reduce exposure to dust.
- Education on attention to nutrition is provided.
- There are many interventions parents can use to help reduce blood lead levels; however t*hese interventions are not a substitute for lead hazard abatement.*

Specific Recommendations:

Particularly in older homes, which may have been painted with lead-based paint, interventions to reduce exposure to dust may help reduce blood lead levels. These include:

- Assure that the child does not have access to peeling paint or chewable surfaces painted with lead-based paint. Pay special attention to windows, window sills and wells.
- If the house was built before about 1960 and has hard surface floors, recommend wet mopping the floors at least once a week with a high phosphate solution (for example, 5-8% phosphates). The phosphate content of automatic dishwashing detergents and other cleaning substances is often listed on the label and may be high enough for this purpose. Otherwise, trisodium phosphate can be purchased in hardware stores. Other hard surfaces, such as window sills and baseboards, should also be wiped with a similar solution.
- Do not vacuum hard surface floors or window sills or wells, since this will disperse dust. Vacuum cleaners with agitators remove dust from rugs more effectively than vacuum cleaners with suction only.
- Wash the child's hands and face before he/she eats.
- Wash toys and pacifiers frequently.
- If soil around the home is or is likely to be contaminated with lead (for example, if home was built before 1960 or the house is near a major highway), plant grass or other ground cover. Since the highest concentrations of lead in a yard tend to be near surfaces that were once painted with lead paint, like exterior walls, if exterior lead paint was likely to be used, plant bushes around the outside of your house so your child cannot play there.
- In areas where lead content of water exceeds the drinking water standard, use only fully flushed water from the cold-water tap for drinking, cooking, and making formula. In communities where water conservation is a concern, use the first-flush water for other purposes.
- Do not store food in open cans, particularly if the cans are imported.
- Do not use pottery or ceramic ware that was inadequately fired or is meant for decorative use for food storage or service.
- Make sure that take-home exposures are not occurring from parental occupations or hobbies.
- Make sure the child eats regular meals, since more lead is absorbed on an empty stomach.
- Make sure the child's diet contains plenty of iron and calcium.

References:

CDC's facts for parents: www.cdc.gov/nceh/lead/faq/cdc97a.htm

EPA Lead web site:
General information: www.epa.gov/lead/
Lead in the Environment: www.epa.gov/seahome/leadenv.html

Treatment guidelines from the American Academy of Pediatrics:
http://aappolicy.aapublications.org/cgi/reprint/pediatrics;96/1/155.pdf

Recommendations for Blood Lead Screening of Young Children Enrolled in Medicaid: Targeting a Group at High Risk:
http://www.cdc.gov/mmwr/preview/mmwrhtml/rr4914a1.htm