



Clinical Guideline Lead Screening and Follow-up Guideline

INITIAL SCREENING

Population	Screening interval per 1997 CDC Guidelines
Children up to the age of 72 months	At ages 1 year and 2 years Between age 36 months and 72 months if not previously screened

ADDITIONAL CRITERIA

- Child a member of a Medical Assistance HMO or receives WIC (Supplemental Food Program for Women, Infants, and Children) or
- Child resides in a targeted zip code area or
- Child's parent or guardian answers "yes" or "don't know" to any of the following questions:
 - Does your child live in or regularly visit a house that was built before 1950? (Consider day-care center, home of a babysitter or relative.)
 - Does your child live in or regularly visit a house built before 1978 with recent or ongoing renovations or remodeling (within the last 6 months)?
 - Does your child have a sibling or playmate who has or did have lead poisoning?

TESTING: Sampling method - Blood lead measurement of either a venous or capillary blood specimen

If result of screening test (ug/dL) is:		Action
0- 9	Recheck BLL at age 2 years	<input type="checkbox"/> < 10 Reassess or rescreen in 1 year. No additional action necessary unless exposure sources change. Provide family lead education
10 – 19	3 months	<input type="checkbox"/> 10 – 14 Provide family lead education. Provide follow-up testing. Refer for social services, if necessary. <input type="checkbox"/> 15 – 19 Same as 10 – 14 plus if BLLs persist (i.e. 2 venous BLLs in this range at least 3 months apart) or worsen, proceed according to actions for BLLs 20 – 44.
20 – 44	1 month – 1 week (The higher the BLL, the more urgent the need for follow-up.)	<input type="checkbox"/> Refer to Gateway Health Plan Care Management education & anticipatory guidance. <input type="checkbox"/> Provide clinical management. <input type="checkbox"/> Contact the appropriate County Health Department in your region for environmental investigation. <input type="checkbox"/> Lead-hazard control.
45 – 59	48 hours	<input type="checkbox"/> Within 48 hours refer to Gateway Health Plan Care Management education & anticipatory guidance. <input type="checkbox"/> Provide clinical management. Chelation therapy at 44ug/dL. <input type="checkbox"/> Contact the appropriate County Health Department in your region for environmental investigation. <input type="checkbox"/> Lead-hazard control, treatment and intervention in a lead safe environment.
60 – 69	24 hours	Same as Actions for 45 – 59 (if symptomatic treatment as if result is ≥ 70 ug/dL).
≥ 70	Immediately as an emergency lab test	<input type="checkbox"/> Hospitalize child and begin medical treatment immediately. <input type="checkbox"/> Refer to Gateway Health Plan Care Management. <input type="checkbox"/> Contact the appropriate County Health Department in your region for environmental investigation. <input type="checkbox"/> Lead-hazard control immediately. <input type="checkbox"/> Discharge to an environmentally safe home.

Clinical Indicator Measured by Gateway is:

Using the HEDIS measurement, the percentage of children 2 years of age who have had one or more capillary or venous lead blood tests for lead poisoning by their second birthday.

KEY EDUCATION NEEDS OF MEMBERS

Anticipatory Guidance:

- 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, horizontal surfaces and other dust collectors. Do not use porches with old paint as play areas for children.
- If the house was built before 1960 and has hard surface floors, wet mop at least once a week with a high phosphate solution (5-8%). Wipe other hard surfaces (such as window sills and baseboards) with same solution. Do not vacuum hard surface floors or windowsills and wells, since this will disperse dust. Vacuum cleaners with agitators remove dust from rugs more effectively than vacuum cleaners with suction only.
- Wash child's face and hands, including fingernails, frequently, even if they do not look especially dirty before child eats and during play outdoors.
- Replace thumbsucking with a pacifier.
- Wash toys and pacifiers frequently.
- Leave all shoes at the door.
- If soil around the home is or is likely to be contaminated with lead, plant grass or other ground cover. Provide sand box for play
- In areas where the lead content of water exceeds the drinking water standard or if water stands for > 6 hours, use only fully-flushed water from the cold-water tap for drinking, cooking and making formula. Flush the cold water faucet by allowing the water to run until it has become as cold as it can get.
- Do not store food in open cans, particularly if the cans are imported. Imported cans may have higher lead content in the side seam soldering.
- Do not use pottery or ceramic ware for food storage or service that was inadequately fired or is meant for decorative use only.
- Make sure that take-home exposures from contaminated work clothes and shoes are not occurring from occupations and hobbies of others in the home. Examples are: stain-glass making, furniture refinishing, remodeling, fishing/hunting, indoor firing ranges, pottery, automotive repair, lead casting, plumbers and highway construction.

Nutritional Education:

- Make sure child eats regular meals, since more lead is absorbed on an empty stomach.
 - Make sure child's diet contains plenty of iron and calcium. Diets with adequate iron and calcium decrease lead absorption from the gastrointestinal tract.
 - Examples of Sources of Iron and Calcium:
- | | |
|----------------------------------|------------------------|
| <u>IRON:</u> | <u>CALCIUM:</u> |
| Meat, liver, chicken | Milk |
| Fortified cereal | Yogurt |
| Cooked legumes (peas, beans) | Cheese |
| Enriched white bread | Green leafy vegetables |
| Enriched noodles | |
| Potatoes | |
| Raisins, dates, apricots, prunes | |
| Spinach | |
| Peanut butter, nuts | |
- Diets high in fat may increase lead absorption from the gastrointestinal tract. Avoid foods high in animal fat such as ice cream, butter and fried foods.

Scientific Evidence Sources:

Center for Disease Control & Prevention (CDC) Guideline 1997

CDC Morbidity and Mortality Weekly Report Recommendations for Blood Lead Screening of Young Children Enrolled in Medicaid: Targeting a Group at High Risk December 08, 2000

CDC Morbidity and Mortality Weekly Surveillance for Elevated Blood Levels Among Children – United States, 1997-2001 September 12, 2003

Department of Public Welfare (DPW) Early & Periodic Screening, Diagnosis & Treatment (EPSDT) Program Requirements 2009