

Lead Screening Recommendations for Children in Washington State

The prevalence and severity of elevated blood lead levels in children have been greatly reduced since the removal of lead from paint and gasoline in the 1970s. However, legacy lead paint remains in some homes in Washington and continues to serve as the primary source of lead exposure in our children. At the present time, housing age, as an indication of potential residential lead hazards, is the most established risk factor for lead poisoning.

Even relatively low levels of blood lead ($<10 \,\mu g/dl$) have been shown to have subtle effects on the developing central nervous system in children resulting in IQ loss, learning difficulties, poor school performance, decreased attention span, and inappropriate behavior.

Anticipatory Guidance: Healthcare providers should educate parents of children 6 months to 6 years of age by providing lead anticipatory guidance during routine check-ups. Prevention requires reducing environmental exposures from paint, dust, soil, and water. Efforts to increase awareness of lead hazards and nutritional interventions to increase iron and calcium, which can reduce lead absorption, are other key components of a successful prevention strategy.

Targeted Screening: Healthcare providers should assess all children for risk of lead poisoning at 12 and 24 months of age. The Department of Health recommends performing a blood lead test based on the guidance in the attached algorithm. If the parent or caregiver does not know if the child has one of the following risk factors, a blood lead test should be performed. Testing for blood lead levels is the only way to definitely know if a child is being exposed to lead.

Testing Methods: Blood lead testing is the only acceptable laboratory test for screening and confirming lead poisoning. Venipuncture is preferred for specimen collection, but finger stick (capillary) collection is acceptable if care is taken to properly clean and prepare the finger. Capillary samples are easier to contaminate because of the possibility of lead containing dust and dirt on the hand or under the fingernails. Children with capillary specimens testing $\geq 5 \mu g/dL$ on a point of care test should undergo confirmatory testing, ideally with a venous specimen.

Confirmatory Testing:

Blood Lead Level	Recommendations on confirmatory screening
<5 mcg/dL	Repeat the blood lead level in 12 months if the child is at high risk or risk changes during the timeframe.
5-14 mcg/dL	Re-test venous blood lead level within 1-3 months to ensure the lead level is not rising. If it is stable or decreasing, retest the blood lead level in 3 months.
15-44 mcg/dL	Confirm the blood lead level with repeat venous sample within 1 to 4 weeks.
≥45 mcg/dL	Confirm the blood lead level with repeat venous lead level within 48 hours.

