

# Provider Reference Guide: Childhood Lead Exposure Blood Lead Testing & Case Management

## PROVIDER ROLE IN CHILDHOOD LEAD POISONING PREVENTION:

- **Test.** Test children according to the Virginia Blood Lead Testing and Case Management Guidelines.
- **Report.** Report all blood lead levels in children to the Virginia Department of Health, regardless of test result.
- **Follow-Up.** Provide follow-up and case management actions based on the blood lead level.

Screening Test	Confirmatory Test
Healthcare providers may use a capillary or venous sample for initial BLL screening. If capillary results are equal to or greater than CDC's Blood Lead Reference Value (BLRV), it is best practice for providers to then collect a venous sample.	CDC recommends that healthcare providers use a venous draw for confirmatory BLL screening. If the initial screening test used a venous sample, the patient does not need another venous draw.

Provider Action by Confirmed Blood Lead Level	
BLL (µg/dL)	Action
<b>&lt; 3.5</b>	<ul style="list-style-type: none"> <li>• Provide education about common sources of lead exposure and information on how to further prevent exposure</li> <li>• Re-test if something in the child's environment changes that increases their risk of lead exposure</li> <li>• Conduct follow-up testing at recommended intervals based on child's age</li> </ul>
<b>3.5 - 9</b>	<ul style="list-style-type: none"> <li>• Conduct follow-up blood lead testing within 3 months</li> <li>• Provide lead poisoning prevention educational materials, including dietary and environmental information</li> <li>• Perform developmental screenings at well-child visits to assess long term impacts of the exposure</li> </ul>
<b>10 - 44</b>	<ul style="list-style-type: none"> <li>• Conduct follow-up testing based on the schedule in the Virginia Blood Lead Testing and Case Management Guidelines               <ul style="list-style-type: none"> <li>◦ 10 – 14 µg/dL: Within 30 days</li> <li>◦ 15 – 19 µg/dL: Within 2 weeks</li> <li>◦ 20 – 44 µg/dL: Within 1 week</li> </ul> </li> <li>• Coordinate with a <a href="#">local health department</a> on all public health case management and follow-up actions</li> <li>• Perform developmental screenings at well-child visits to assess long term impacts of the exposure</li> </ul>
<b>≥ 45</b>	<ul style="list-style-type: none"> <li>• Conduct follow-up testing based on the schedule in the Virginia Blood Lead Testing and Case Management Guidelines               <ul style="list-style-type: none"> <li>◦ 45 – 69 µg/dL: Within 48 hours</li> <li>◦ 70+ µg/dL: Immediately, within 24 hours</li> </ul> </li> <li>• All of the above, PLUS: consult with an expert about chelation therapy. Contact <b>Pediatric Environmental Health Specialty Unit Region 3 (833-362-2243)</b> or <b>Poison Control Center (1-800-222-1222)</b>.</li> </ul>

For additional details on medical case management, refer to the *Medical Case Management for Childhood Blood Lead Levels* document.

**Confirmed BLL  $\geq$  CDC's blood lead reference value (BLRV):** A child with one venous blood test  $\geq$  3.5  $\mu\text{g}/\text{dL}$  or two capillary blood tests  $\geq$  3.5  $\mu\text{g}/\text{dL}$  drawn within 12 weeks of each other. *The second capillary test must occur at least 48 hours after the initial capillary test.*

## REPORTING CHILDHOOD BLOOD LEAD LEVELS

All blood lead test results for children under the age of 16 must be reported to the Virginia Department of Health. If your practice does not support electronic reporting, results must be manually reported. To manually report a blood lead test result, either:

- Complete the [Virginia Epi-1 Form](#), or
- Fax the report to **804-864-8102**

## VIRGINIA BLOOD LEAD TESTING CRITERIA

Per 12VAC5-90-215 of the Code of Virginia, Virginia is a targeted blood lead testing state. Children that fall under a specified set of risk criteria should get a blood lead test.

Children in any of the following risk categories should have their blood tested at **12** and **24 months**:

1. The child is eligible for or receiving benefits from Medicaid or the Special Supplemental Nutrition Program for Women, Infants and Children (WIC);
2. The child is living in or regularly visiting a house, apartment, dwelling, structure, or child care facility built before 1960;
3. The child is living in or regularly visiting a house, apartment, dwelling, structure, or child care facility built before 1978 that has (i) peeling or chipping paint or (ii) recent (within the last six months) ongoing or planned renovations;
4. The child is living in or regularly visiting a house, apartment, dwelling, or other structure in which one or more persons have blood lead testing yielding evidence of lead exposure;
5. The child is living with an adult whose job, hobby, or other activity involves exposure to lead;
6. The child is living near an active lead smelter, battery recycling plant, or other industry likely to release lead;
7. The child's parent, guardian, or other person standing in loco parentis requests the child's blood be tested due to any suspected exposure; or
8. The child is a recent refugee or immigrant or is adopted from outside of the United States.

A child up to **72 months** in those categories who hasn't previously been tested (or who has experienced a change that has resulted in an increased risk of exposure to lead), or the sibling of a child who has an elevated blood lead level should also be tested.

## HEALTH EFFECTS OF LEAD EXPOSURE

There is no safe blood lead level. Even a small amount of lead can be harmful.

Health Effects	Long Term Impacts
<ul style="list-style-type: none"><li>• Damage to the brain and nervous system</li><li>• Slowed growth and development</li><li>• Learning and behavior problems</li><li>• Hearing and speech problems</li></ul>	<ul style="list-style-type: none"><li>• Reduced IQ</li><li>• Attention-related behavioral problems</li><li>• Decreased cognitive performance</li><li>• Increased aggressive behavior</li></ul>

## COMMON SOURCES OF LEAD

- **Paint.** Chipping and peeling lead-based paint and lead dust from deteriorating lead-based paint (in homes built before 1978).
- **Soil.** Soil surrounding old buildings that were painted with lead-based paint, near high traffic areas, or near airports that support piston engine aircraft.
- **Water.** Water in homes built before 1986 where the pipes, fixtures, or solder may contain lead.
- **Traditional medicines and cosmetics.** E.g., kajal, kohl, sindoor, ba-baw-san, daw Tway, greta, azarcon, and ghasard.
- **Imported spices and candy.** These items can become contaminated if grinding of ingredients is done improperly or if lead is added to increase product weight.
- **Toys and jewelry.** Some imported or antique toys and jewelry can contain lead in paint or metal pieces.
- **Family member occupations and hobbies.** Construction and remodeling work on older homes, battery recycling or radiator repair, working at a shooting range, recycling scrap metal or electronics, welding or soldering, making or glazing ceramics, or stained glass.

## STRATEGIES FOR REDUCING LEAD EXPOSURE

- **Wash children's hands and toys often.** Frequently washing hands and toys can reduce the risk of a child ingesting any lead dust on their hands or toys during play.
- **Wet-wipe and wet-mop around windowsills, doors, and entryways.** Cleaning these areas frequently can reduce a child's risk of contact with lead dust.
- **Do not let children play in bare soil.** If they do, immediately wash their hands and clothes. Children may accidentally ingest or inhale lead dust or lead based paint particles from contaminated soil.
- **Run water for 60 seconds before use, and cook with cold water only.** Hot water is more corrosive than cold water. Run water before use to flush out the water that has been sitting stagnant in the pipes.
- **Cook nutrient dense meals, high in iron, calcium, and vitamin C.** A healthy diet can prevent lead from being absorbed in the body.

## RESOURCES

### Guidance Documents

- [Virginia Blood Lead Testing and Case Management Guidelines](#)
- [Medical Case Management of Childhood Blood Lead Levels](#)

### Additional Education

- VDH | [Virginia Childhood Lead Poisoning Prevention Program educational materials](#)
- CDC | [Childhood lead poisoning prevention communication resources](#)
- PEHSU | [Children's Health Issue: Lead](#)
- AAP | [Lead](#)
- ACOG | [Lead Screening During Pregnancy and Lactation](#)

### REFERENCES

- AAP, 2016. Prevention of Childhood Lead Toxicity. Pediatrics. <https://publications.aap.org/pediatrics/article/138/1/e20161493/52600/Prevention-of-Childhood-Lead-Toxicity>
- CDC, 2025. Recommended Actions Based on Blood Lead Level. [https://www.cdc.gov/lead-prevention/hcp/clinical-guidance/?CDC\\_AAref\\_Val=https://www.cdc.gov/nceh/lead/advisory/acclpp/actions-blls.htm](https://www.cdc.gov/lead-prevention/hcp/clinical-guidance/?CDC_AAref_Val=https://www.cdc.gov/nceh/lead/advisory/acclpp/actions-blls.htm)
- PEHSU, 2021. Recommendations on Management of Childhood Lead Exposure [https://www.pehsu.net/lib\\_facts/pehsu\\_fact\\_sheet\\_lead\\_management\\_for\\_health\\_professionals.pdf](https://www.pehsu.net/lib_facts/pehsu_fact_sheet_lead_management_for_health_professionals.pdf)



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