

To determine a child's risk to lead hazard exposure, AAP recommends using the Lead Poisoning Verbal Lead Risk Assessment starting at 6 months of age:

CDC recommends providing preventive education regarding lead hazard exposure for all children 6 months-6 years of age. Physicians should document in the child's medical record at each preventive visit, noting if the verbal assessment was completed, any preventive education that has been provided, any "yes or don't know" responses and blood tests completed for "yes or don't know" responses.

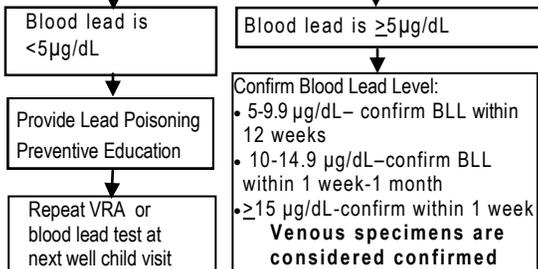
1. Does the child: a) Live in or visit a building built before 1978 with peeling or chipping paint or with recent or ongoing remodeling? B) Play in areas of bare soil?
2. Does the child have a brother/sister or playmate that has or has had lead poisoning?
3. Do you or a family member work on a farm; on a bridge, tunnel or high construction area; with batteries, ammunition or visit a firing range?
4. Do you use any folk remedies that may contain lead or use imported pottery or ceramic ware for cooking, eating or drinking?

### Kentucky's Blood Lead Screening Guidelines EPSDT/Well child exam <72 months

Provide blood lead test at 12 & 24 months for all at-risk patients and anytime 25-72 months of age where there is not a documented blood lead test.

**At-risk** patients include:

- Medicaid enrolled, children <72 months of age and prenatal patients
- Those living in a **targeted zip code area**
- "Yes" or "Don't Know" response on Lead Poisoning Risk Assessment Questionnaire (AAP recommends the use of the verbal risk assessment starting at 6 months of age)



Report BLL's ≥ 5µg/dL to the Local Health Department (LHD) for assistance in providing follow-up interventions such as:

- Follow-up blood testing
- Preventive Education
- Home Visit Visual Investigations/Lead Inspections
- Monitor lead levels until BLL is <5µg/dL

Blood Lead Screening Results: Follow Up Guidance	
BLL 1-4.9 µg/dL	<ul style="list-style-type: none"> <li>• Provide lead hazard preventive education</li> <li>• Repeat blood lead level (BLL) annually</li> <li>• Provide routine at-risk blood lead tests</li> <li>• Review verbal risk assessment at next preventive visit</li> </ul>
BLL 5-14.9 µg/dL	<ul style="list-style-type: none"> <li>• Confirm BLL within 12 weeks</li> </ul>
BLL 10-14.9 µg/dL	<ul style="list-style-type: none"> <li>• Confirm BLL one week to one month</li> </ul>
BLL 5-14.9 µg/dL	<ul style="list-style-type: none"> <li>• Confirm BLL as above</li> <li>• Provide lead hazard preventive education</li> <li>• Home Visit to help families determine lead hazards</li> <li>• Report blood lead result to the LHD</li> <li>• Repeat BLL Q 12 weeks until &lt;5µg/dL</li> </ul>
BLL ≥15 µg/dL	<ul style="list-style-type: none"> <li>• <b>Confirm BLL within one week if not venous</b></li> <li>• <b>Same interventions as above</b></li> <li>• Report blood lead result to LHD</li> <li>• Lead Inspection is required to determine lead hazards in child's environment</li> <li>• Repeat BLL Q 1- 2 months until &lt;5µg/dL</li> </ul>
BLL's ≥25 µg/dL	<ul style="list-style-type: none"> <li>• Same interventions as above</li> <li>• Please consult with a lead specialist for guidance on medical evaluation and potential chelation therapy</li> <li>• Repeat BLL Q 1-2 months until &lt;5µg/dL</li> </ul>
BLL's ≥45 µg/dL	<ul style="list-style-type: none"> <li>• Venous confirmation immediately</li> <li>• Same interventions as with BLL's ≥25µg/dL</li> <li>• Repeat BLL Q 1 month until &lt;5µg/dL</li> </ul>

For more information regarding lead poisoning and lead screening guidelines, please visit the following web-sites:

- Center for Medicare and Medicaid Services: <http://www.medicare.gov/Medicare-CHIP-Program-Information/By-Topics/Benefits/Early-and-Periodic-Screening-Diagnostic-and-Treatment.html>
- American Academy of Pediatrics: <http://pediatrics.aappublications.org/content/pediatrics/116/4/1036.full.pdf>
- Pediatric Preventive Guidelines: [https://www.aap.org/en-us/professional-resources/practice-support/Periodicity/Periodicity%20Schedule\\_FINAL.pdf](https://www.aap.org/en-us/professional-resources/practice-support/Periodicity/Periodicity%20Schedule_FINAL.pdf) Centers for Disease Control and Prevention: <http://www.cdc.gov/nceh/lead/default.htm>
- Consumer Product Safety Commission: [CPSC.gov](http://www.cpsc.gov)
- Department for Public Health Childhood Lead Poisoning Prevention Program: [chfs.ky.gov/dph/mch/cfhi/clppp.htm](http://chfs.ky.gov/dph/mch/cfhi/clppp.htm)



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Prevent. Promote. Protect.

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Rev. JUNE 2016

## Kentucky's Childhood Lead Poisoning Prevention Program (KYCLPPP)

### Blood Lead Screening Guidelines and Recommendations for Physicians



### Childhood Lead Poisoning Prevention

275 East Main Street HS2GWA  
Frankfort, KY 40621  
Phone: 502-564-2154

<http://chfs.ky.gov/dph/mch/cfhi/clppp.htm>

## **Lead remains one of the most preventable environmental health risks**

for young children despite regulations limiting lead additives in gasoline and house paint. Although lead has been eliminated from house paint in this country, lead-based paint hazards in older homes remain a primary source of high dosage lead exposure for preschool aged children according to the Center for Disease Control's (CDC) *Lead Poisoning in Young Children*. Atlanta, GA: US Department of Health and Human Services; 2005.

### **Effects of Lead Poisoning**

Children exposed to even low levels of lead can suffer from health impairments including the following:

- Developmental delay and decreased IQ
- Attention Deficit Disorder (ADD)
- Decreased bone and muscle growth
- Damage to nervous system, kidneys, hearing,
- speech and language delays
- Seizures, unconsciousness and even death at extremely high levels

### **Lead Sources**

The primary sources of lead exposure are:

- Deteriorated paint which causes interior and exterior lead dust
- Soil
- Water
- Other Lead sources can include:
  - Costume jewelry
  - Clothing or shoes from a parents workplace
  - Fishing sinkers, bullets and other hobbies
  - Toys

Since 2007, over 15 million toys have been recalled because they exceed the Consumer Product Safety Commissions' standards for lead in paint. These toys pose the greatest hazard to young children who might mouth or chew objects. Since protective coverings on lead paint can deteriorate over time posing a greater risk, parents should use caution when buying toys second hand. Any recalled toy should be returned to the store of purchase to be disposed of properly. To check for recent recalls and archived list please visit the website at [www.cpsc.gov](http://www.cpsc.gov).

**Blood Lead Screening is required for children <72 months of age who are receiving Medicaid Services. Pursuant to 907 KAR 11:034, Early Periodic Screening, Diagnosis and Treatment (EPSDT) health assessments must include laboratory procedures appropriate for age and population groups, including blood lead screening, test recipients at ages 12 and 24 months or any time less than 72 months if not previously tested. This is covered under Preventive Fee Schedule code 83655.**

The Kentucky Department for Public Health (DPH) provides assistance for health care practitioners in screening young children for blood lead levels. For more information regarding screening, reporting elevated blood lead levels or environmental services please contact your local health department or the Childhood Lead Poisoning Prevention Program (CLPPP).

**Medicaid/KCHIP regulations require a blood lead test at 12 and 24 months** to address the greater likelihood of lead exposure for low income children. The Centers for Disease Control and Prevention (CDC) suggests that states develop a plan to target children who are at risk for lead poisoning. The American Academy of Pediatrics (AAP) recommends that pediatricians provide screening to Medicaid as well as **non-Medicaid** enrolled children. AAP recommends that pediatricians periodically use community specific risk assessment questionnaires to assess risk between the ages of six months and six years (*Pediatrics*. 2005;116:1036-1046).

Kentucky's blood lead screening guidelines and per KRS 211.900, at-risk populations include children <72 months of age and younger and prenatal patients who 1) Live in a structure built and painted prior to 1978, 2) Reside in a high risk area or 3) Possess one or more risk factors identified in the lead poisoning verbal risk assessment. *If a risk factor is identified, a blood lead screening test should be completed* (For more information on blood lead screening guidelines or the lead poisoning verbal risk assessment, please visit [chfs.ky.gov/dph/mch/cfhi/clppp.htm](http://chfs.ky.gov/dph/mch/cfhi/clppp.htm)).

CDC's May 2012 recommendations are working towards a nationwide primary-prevention policy to ensure that no children in the U.S. live or spend significant time in homes, buildings, or other environments that expose them to lead hazards. CDC recommends that clinicians take an active role in preventing lead hazard exposures. According to these new recommendations, clinician collaboration is vital to assuring the health of Kentucky's families. See the full report at [chfs.ky.gov/dph/mch/cfhi/clppp.htm](http://chfs.ky.gov/dph/mch/cfhi/clppp.htm).

- IV. Clinicians should be a reliable source of information on lead hazards and take the primary role in educating families about preventing lead exposures and recommending families having a pre-1978 home to get environmental assessments prior to exposure.
- V. Recommendation: Clinicians should monitor the health status of all children with a confirmed BLL  $\geq 5\mu\text{g/dL}$  for subsequent changes in BLL until all recommended environmental investigations and mitigation strategies have been completed. Clinicians also should provide BLL test results to the family of affected children in a timely and appropriate manner.
- VI: Clinicians should ensure that BLL values at  $\geq 5\mu\text{g/dL}$  are reported to local health department. Clinicians also should collaborate with these agencies to ensure that the appropriate services and resources are provided to children and their families.

## **Lead and Pregnancy**

CDC has provided national guidelines on lead testing for prenatal patients, "**Guidelines for the Identification and Management of Lead Exposure in Pregnant and Lactating Women**". These guidelines can be linked at:

<http://www.cdc.gov/nceh/lead/publications/LeadandPregnancy2010.pdf>

According to the 2006 *Pediatrics* article, "Screening for Elevated Lead Levels in Childhood and Pregnancy", maternal lead levels as low as  $5\mu\text{g/dL}$  may result in adverse pregnancy outcomes, including spontaneous abortion, premature birth, stillbirth, birth defects and decreased intellect and/or behavioral problems in the infant. (*Pediatrics*. 2006;118:1867-1895).

### **Recommendations for blood lead screening pregnant women:**

- The lead poisoning verbal risk assessments should be used to determine a prenatal patients lead hazard risk and be provided at the initial prenatal visit or positive pregnancy test visit.
- At-risk prenatal patients should be blood lead tested.
- Medicaid reimburses prenatal blood lead testing for those enrolled.
- If an elevated blood lead level is identified, pregnant women should be counseled on calcium supplementation and proper nutrition to minimize the release of lead from bone stores; in addition, assessment and modifications to her home or working environment could be used to minimize

