

# lead poisoning

*Lead poisoning is the number one environmental health hazard for children.*

Lead is a highly toxic metal found in many products in and around our homes. Lead poisoning is caused by swallowing or inhaling lead particles or dust. You cannot see, taste or smell lead. It is often found in paint, dust and soil in older homes. Children are often poisoned when they swallow or breathe in lead dust or by eating dirt or paint chips containing lead. Lead poisoning can damage the brain, kidneys, and the nervous system of small children.

## What are the effects of lead poisoning?

- > lowered IQ
- > learning problems
- > behavioral problems
- > attention deficit disorders
- > language or developmental delays
- > brain damage
- > kidney damage
- > decreased growth
- > poor coordination
- > stomach problems
- > fatigue & sleeplessness

## Who is at highest risk?

*Children six years of age or younger who:*

- > live in or regularly visit a house built before 1950
- > live in or regularly visit a house built before 1978 that has recently been remodeled (in the last 6 months)
- > engage in frequent hand-to-mouth activity
- > have iron deficiency or anemia
- > live with an adult with a job or hobby that involves exposure to lead



# blood lead screening

The Oklahoma Childhood Lead Poisoning Prevention Program (OCLPPP) of the Oklahoma State Department of Health recommends that health care providers screen all children at 12 and 24 months of age with the Lead Exposure Risk Assessment Questionnaire (LERAQ). Any child, 6 months up to 6 years (72 months) of age, should be screened with the LERAQ if they have never been screened before. If you (parent/guardian) answers "yes" or "don't know" to any of the questions, your child should receive a blood lead test.

The first test is a Screening test. Blood is taken from the finger. This is also called a capillary test. If the result of the capillary test is equal to or greater than ( $\geq$ ) 10 micrograms ( $\mu\text{g}$ ) per deciliter (dL) of blood, then the child should receive a venous test (blood taken from the arm). This is called a Confirmatory Test.

Ten  $\mu\text{g}/\text{dL}$  of lead in children's blood is considered to be the level of concern by the Centers for Disease Control and Prevention (CDC) in Atlanta. Recommendations from the CDC say that venous blood specimens are preferred for blood lead analysis. In Oklahoma, as well as in other states, an elevated blood lead level is confirmed with a venous blood test not a capillary test.

Children up to 72 months (6 years) of age who have a capillary blood lead level of  $\geq 10 \mu\text{g}/\text{dL}$  should receive a venous blood lead test. For a child with an elevated venous blood lead level ( $\geq 10 \mu\text{g}/\text{dL}$ ), follow-up blood testing should occur every one to two months. Venous testing continues until two consecutive venous tests are below  $10 \mu\text{g}/\text{dL}$ . The table below shows how the OCLPPP currently recommends follow-up testing for children under 6 years of age.

<i>If capillary blood lead test result is:</i>	<i>Perform confirmatory venous blood lead test:</i>	<i>If venous test is <math>\geq 10 \mu\text{g}/\text{dL}</math>, perform follow-up venous test in:</i>
5-9 $\mu\text{g}/\text{dL}$	annually or per provider recommendation	
10-19 $\mu\text{g}/\text{dL}$	within one month	2 months until 2 tests are below $10 \mu\text{g}/\text{dL}$
20-44 $\mu\text{g}/\text{dL}$	within one week	2 months until 2 tests are below $10 \mu\text{g}/\text{dL}$
$>45 \mu\text{g}/\text{dL}$	within 48 hours	one month until test is $\leq 20 \mu\text{g}/\text{dL}$ then every 2 months as above

Prevention of lead exposure at all levels is recommended.



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