Q & A ON CHILDHOOD LEAD POISONING



Beginning in 1991, the Centers for Disease Control and Prevention (CDC) referred to a blood lead level (BLL) of 10 mcg/dL as a 'level of concern.' In May 2012, CDC announced a change to this recommendation based on study findings that demonstrated harmful effects at levels below 10 mcg/dL. The CDC has now issued guidelines setting a "reference value" of 5 mcg/dL. This value comes from the 97.5th percentile of blood lead level distribution in the United States according to the National Health and Nutrition Examination Survey (NHANES). However, even blood lead levels of less than 5 mcg/dL can have harmful effects. There is no "safe level of lead."

The Oklahoma Childhood Lead Poisoning Prevention Program has sent information to parents and guardians of children with elevated blood lead levels referring them to you, their provider, with questions they may want to ask regarding lead exposure. The questions and suggested answers are listed below to assist you in formulating your responses to your patients' parents/families.

CDC, www.cdc.gov/nceh/lead/ACCLPP/CDC_Response_Lead_Exposure_Recs.pdf. CDC, Screening During the Domestic Medical Examination for Newly Arrived Refugees, April 2012, www.cdc.gov/immigrantrefugeehealth/guidelines/lead-guidelines.html.

1. How was my child exposed to lead and can it be treated?

Sources of Lead Exposure:

» The most common sources of lead exposure are lead-based paint and lead in dust and soil resulting from lead-based paint deterioration, previous use of leaded gasoline, or industrial or mining activities that occurred at a site. Young children may come into direct contact with contaminated dust and soil through on site exposure and normal hand-to-mouth activity.

» Occupations involving lead are a risk for adults as well as children. Take-home exposure refers to lead contamination on the skin, clothes, hair, shoes, or in the vehicle of the adult worker. The worker may inadvertently take this lead exposure home to the child. Some occupations and hobbies at higher risk are: battery manufacture/recycling, plastics, soldering, construction, renovation, demolition, painting, recycling, making fishing sinkers or ammunition, and spending time at a firing range.

» Some consumer products contain lead. These products include some imported items such as cosmetics, spices, candy, dried plums, alternative or holistic medications, clay pots, toys, metal, and vinyl objects and costume jewelry.

» Recent immigrants, foreign adoptees, or those who travel abroad frequently may have been exposed to lead in another country.

Treatment:

» Children with a very high confirmed level of blood lead (45 mcg/dL or more) may be given chelation to reduce the lead in the body and diminish the symptoms of a high blood lead level.

» Most children will not fall in this category; therefore, it is generally considered that there is no medical 'treatment' for low levels of lead poisoning.

» It is important to identify and remove the source of exposure and to work with the family to address any lasting effects of lead exposure, either through referrals for developmental screening, nutritional guidance or cognitive behavioral referrals.

2. What does my child's lead test result mean?

» A child with a venous blood lead level of 5 or more has a level that is higher than 97.5% of children in the U.S. of a similar age group.

» Because there is no safe level of lead, the lower the number, the better.

» A level of 5 or above indicates that the child has been exposed to lead recently and that the child should be removed from the source of exposure to prevent further adverse effects.

(CONTINUED ON REVERSE SIDE)

3. What are the symptoms of a high lead level?

- Usually, children with elevated blood lead levels do not exhibit overt symptoms.
- The child may look and feel fine and initially appear to be growing as expected and have no discernible developmental delays.
- The most significant issue with lead poisoning is in terms of risk for neurodevelopmental disorders.
- Lead exposure has been associated with Attention-Deficit/Hyperactivity Disorder, developmental delays, speech and language problems and cognitive deficits.
- Previous or persistent lead poisoning may present as learning or behavioral issues often not identified until school age.
- While children with lead poisoning typically do not present with overt symptoms, acute lead exposure should be considered if a child presents with seizures, encephalopathy or has a history of pica.
- A venous blood lead level is necessary to confirm the diagnosis of lead poisoning.

4. How can I reduce lead exposure?

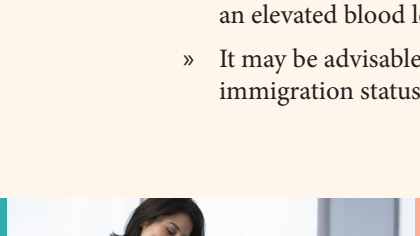
- Parents who live in homes built before 1978 should check the interior and exterior of their homes for paint that is chipping, peeling, fading, blistering or cracking.
- Particular focus should be placed on areas such as door frames and window sills because these tend to be the first to have friction damage from frequent opening and closing.
- Parents should be advised to wet mop floors and wet wipe windowsills and other surfaces that might contain lead dust.
- Bare soil should be covered with stones, grass, mulch, or plants. Anyone working with lead should shower and change clothes before getting in their car, coming home from work, and before coming into contact with their children.
- Parents should not allow anyone to give natural or traditional remedies to their child and should be encouraged to discuss any medications with you, their provider.
- The Consumer Product Safety Commission has a website and a 1-800 number for recalls on toys and other items that might contain lead.
- Parents should ensure that their child's hands are kept clean and that they redirect hand-to-mouth behavior when possible.
- Children with adequate amounts of calcium and iron in their body absorb less lead.
- A diet rich in calcium and iron should be recommended and could include a referral to a nutritionist for the child with elevated lead levels.

5. Where do I need to go to get my child tested for lead?

- Children should be given a follow-up appointment for a venous blood lead sample at your office.
- This should continue on a 90 day schedule until two consecutive tests are below 5 mcg/dL.
- Some children may be able to get lead testing at their local health department (Oklahoma City County and Tulsa County Health Departments do NOT offer lead testing; parents should call the health department to find out if it is offered).

6. Should other people in my home be tested?

- Any other children under the age of 6 in the home who share similar exposures should be tested to ensure they do not have an elevated blood lead level.
- It may be advisable to test adults or children age 6 or older if there is a question of a higher risk due to occupation, immigration status, or previous use of natural, holistic, or home remedies, etc.



HELPFUL NUMBERS AND RESOURCES:
Oklahoma Childhood Lead Poisoning Prevention Program
(405) 271-6711 or 1-800-766-2223
Consumer Product Safety Commission 1-800-638-2772 www.cpsc.gov

The Oklahoma State Department of Health (OSDH) is an equal opportunity employer. This publication, issued by the OSDH, was authorized by Terry L Cline, PhD, Commissioner of Health. 60,000 copies were printed by Central Printing in June 2015 at a cost of $xxxx.

OKLAHOMA WORKS