

OKLAHOMA HEALTHY HOMES INITIATIVE

CHILDHOOD LEAD POISONING

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Facts & Figures

- Childhood lead poisoning is a major preventable environmental health problem, which may cause irreversible adverse effects particularly in children less than 6 years of age.
- Lead poisoning is caused by swallowing or inhaling lead particles or dust.
- The most common risk factor for childhood lead poisoning is residential lead-based paint, which is used in almost all housing units built prior to 1950, and lead contaminated dust and soil.
- Lead in residential paint was banned in 1978, which means that all houses built before 1950 and many built between 1950 and 1978 have lead-based paint.
- Children are often poisoned when they swallow or breathe in lead dust or by eating dirt or paint chips containing lead.
- Although there is no safe level of lead in the blood, the Centers for Disease Control and Prevention (CDC) has set the level of concern for children at 10 micrograms of lead per deciliter of blood ($\mu\text{g} / \text{dL}$) at which specific interventions should be implemented to reduce the blood lead.
- According to the U.S. Department of Housing and Urban Development (HUD), deteriorated leaded paint and elevated levels of lead-contaminated house dust are present in an estimated 24 million U.S. housing units, and 1.2 million of these units are homes occupied by low-income families with young children.
- Lead is also found in toys, home health remedies, imported cosmetics, pottery, imported mini blinds etc.

Lead in residential paint was banned in 1978.

Lead based paint hazards are present in 24 million U.S. homes and low-income families with young children occupy 12 million of these homes.



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- Health effects of lead poisoning include developmental problems, lower I.Q., behavioral problems, attention deficit disorder, learning problems, language delay, anemia, damage to kidneys and nervous system and, rarely death.
- Lead exposure in pregnant females could lead to adverse health effects in their unborn children, such as pre-term birth, decreased gestational maturity, lower birth weight, reduced postnatal growth, increased incidence of minor congenital anomalies, and early neurologic or neurobehavioral deficits.
- Most children with elevated blood lead levels (EBLLs) have no obvious signs and symptoms. A blood test is the only sure way to know if a child has lead poisoning.
- According to the CDC, approximately 310,000 U.S. children less than 6 years of age have blood lead levels greater than or equal to 10 $\mu\text{g}/\text{dL}$.
- One of the goals of Healthy People 2010 is the elimination of childhood lead poisoning as a public health problem.
- During 2004-2006, 9,233,337 U.S. children less than 6 years of age were tested for lead poisoning and 139,355 (1.5%) children were found to have blood lead levels greater than or equal to 10 $\mu\text{g}/\text{dL}$.
- During 2004-2006, 67,052 Oklahoman children younger than 6 years of age were tested for lead poisoning and 567 (0.8%) children were found to have blood lead levels greater than or equal to 10 $\mu\text{g}/\text{dL}$.

CDC has set a level of concern for children at 10 $\mu\text{g}/\text{dL}$.

There are approximately 310,000 children less than 6 years of age nationwide with lead levels greater than or equal to 10 $\mu\text{g}/\text{dL}$.

Economic & Social Burden of Childhood Lead Poisoning

- According to the findings of the President's Task Force on Environmental Health Risks and Safety Risks to Children, 2000:



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- ❑ A child is estimated to lose 2 IQ points for each 10 $\mu\text{g} / \text{dL}$ increase in blood lead level.
- ❑ Cognitive ability is reduced, on average, by about one-quarter IQ point for every 1 $\mu\text{g} / \text{dL}$ increase in childhood blood lead. A reduction of one IQ point reduces lifetime earnings, on average, by about \$9,600.
- According to the EPA, Childhood lead poisoning between 2000-2010 is estimated to cost the nation \$22 billion in forgone earnings.

How is Childhood Lead Poisoning associated with Healthy Homes Principles?

- **Keep it Dry:** Keeping the home dry by controlling moisture helps minimize peeling and chipping of lead-base paint.
- **Keep it Clean:** Children often ingest lead contaminated dust while playing on the floor. It is important to clean paint chips and lead dust on windowsills and on the floor near windows, doorways and woodwork using a damp mop or cloth and/or a vacuum using high efficiency particulate air (HEPA) filter.
- **Keep it Contaminant Free:** It is important to keep a home free of lead hazards by fixing deteriorating paint, cleaning lead dust and removing products containing lead which have been recalled by the Consumer Protection Safety Commission.
- **Keep it Maintained:** It is important to keep a home well maintained by performing regular inspection, cleaning and needed repair to prevent lead-based paint hazards.

