

Community concern or issue: *Lead Poisoning* from sources in the home

How does this issue impact citizen health or the environment?

Lead is a toxic heavy metal that produces many diverse health effects, particularly in young developing children. It can enter the body through ingestion or inhalation and is dangerous because it interferes with normal body functions. It can change the way the blood-forming cells work, alter the way nerve cells signal each other, and can disturb or destroy the way the brain makes connections for thought processes. At very high levels, lead has been known to cause serious physical and mental developmental problems, coma, and even death. Even at low levels, lead poisoning can cause impaired hearing and speech, learning disabilities, slowed growth, reduced attention spans, hyperactivity, and other behavior problems.

The single largest source of home lead exposure is lead paint. Lead was commonly added to residential paint to add durability and strength. When this paint is scraped, chipped, peeled, or otherwise disturbed, this lead becomes available to the residents of the home, usually in the form of dust. The dust is then ingested or inhaled.

Existing controls or standards

In 1978, the Consumer Product Safety Commission banned the use of lead in residential paint. According to the Centers for Disease Control and Prevention (CDC), blood lead levels in children under six years old are considered “elevated” if over 10 µg/dl. Children under the age of 6 are considered the highest priority because most development occurs during this time and high lead levels can have a permanent affect on the rest of a child’s life. Children between the ages of one and three years are the most commonly lead poisoned, due to the hand-to-mouth action that

occurs during these years. Many toddlers put everything in their mouths, including any lead dust that may be present.

How is this issue impacting Salina?

Homes built after 1978 are safe from lead-based paint, but homes built before then still represent a major environmental threat to children. Eighty percent of Salina’s homes were built prior to 1978. This means there is a large potential for many homes to have lead-based paint hazards. According to the 2000 Census data, Saline County has approximately 4500 children six years of age or younger. CDC estimates 2.8% of all children six years old or younger to have lead levels above the 10 µg/dl standard, which means Saline County may have as many as 126 children with elevated blood lead levels. In 2009, only eight children (6% of the potential) were identified and case managed for lead poisoning.

What factors and behaviors contribute to this problem?

Contributing factors include the public’s lack of knowledge regarding this issue, the inability to recognize a lead hazard, improper home maintenance, and lack of funds to handle the lead paint properly.

Potential solutions – how can the community help with this issue?

Only 6% of the potential lead-poisoned cases have been identified and investigated, an unbelievably low number. We can do a much better job of protecting the children in our community through public education, targeted home inspections, and addressing maintenance issues.