Lead Poisoning

Lead poisoning results from an excessive presence of lead in the body. Lead is highly toxic; even mild lead poisoning can permanently damage a child’s attention span and IQ. It is more dangerous to children than to adults because it affects the development of the brain and nerves. Lead poisoning harms the nervous system and several organs, including the kidneys. But it is entirely preventable (http://dhs.wisconsin.gov/lead/LegacyofLead/criticalissues.pdf).

Sources of Lead Poisoning

The most common source of lead poisoning is paint manufactured before 1978. When this paint decays, it creates dust that contains traces of lead. Children can inhale this dust, ingest it when they touch peeling paint and put their fingers in their mouths. Other items also contain lead, including painted toys or decoration made outside the U.S. and paint sets or art supplies (http://www.nlm.nih.gov/medlineplus/ency/article/002473.htm).

Symptoms of Lead Poisoning

Usually, lead poisoning builds up over time from repeated exposure to small amounts of lead. The symptoms are not always very obvious, but even low levels of exposure can cause damage. The symptoms of lead poisoning are similar to those of other childhood problems. As a result, it often goes untreated. Abdominal pain, headaches, irritability, and aggressive behavior are a few of these symptoms (http://www.nlm.nih.gov/medlineplus/ency/article/002473.htm).

Childhood Development

Lead exposure can influence health and behavior in young children. Some of these effects include reduced IQ and attention span, reading and learning disabilities, hearing problems, slowed body growth, and aggressive behavior. These effects can lead to problems in the classroom and an increased chance of juvenile delinquency.

Problems in the Classroom

Lead poisoning is related to an increased likelihood that a child will face difficulties in school. It interferes with the normal development of a young child’s brain, and this may lead to reduced intellectual functioning and a decreased capacity to learn. Learning difficulties and school failure can lead to higher high school dropout rates (http://www.psr.org/chapters/boston/resources/in-harms-way.html).
Juvenile Delinquency
Children affected by lead poisoning are more likely to exhibit antisocial behavior, aggression, and hyperactivity. These issues can lead to delinquent behavior. Recent research suggests that childhood lead poisoning may be correlated with 88% of the variation in violent crime rates in the U.S. over several decades. This research points to lead poisoning as contributing to disciplinary problems in school, delinquency, and adult criminality (http://dhs.wisconsin.gov/lead/LegacyofLead/criticalissues.pdf).

Current Prevention Efforts
Lead poisoning is very preventable, and efforts are currently being made in Wisconsin and throughout the U.S. to protect children from this danger. Simply fixing housing and eliminating lead-based paint before children are exposed would greatly reduce the amount of lead poisoning seen in the country today. The Environmental Protection Agency issued a Renovation, Repair, and Painting rule on April 22, 2008 requiring lead-safe practices during construction and renovation to prevent lead poisoning (http://www.epa.gov/lead/pubs/renovation.htm).

Efforts in Wisconsin
Wisconsin’s Department of Health Services is currently following the example of the EPA and incorporating rules similar to the Renovation, Repair, and Painting rule. Wisconsin’s goal is to eliminate lead poisoning by making housing leadsafe and implementing better detection and treatment of childhood lead poisoning (http://dhs.wisconsin.gov/lead/index.htm).

What Can You Do to Help?
There are several things juvenile justice professionals can do to help address lead poisoning, including:

- Be alert to situations you encounter in which old paint may be creating a health hazard for siblings of the youth you work with.
- Understand the implications of exposure to lead on children’s brain development as you work with children who may be suffering its consequences.
- Support efforts in your local community to reduce and prevent childhood lead exposure.
- Support increased state and federal resources directed toward reduction of lead exposure to children.

Sources
- Wisconsin Department of Health Services: Lead -Safe Wisconsin.
- U.S. Environmental Protection Agency: Lead Renovation, Repair and Painting.

Prepared by Shauna Manion. For more information about the Council’s agenda for health care, juvenile justice, early childhood education, fair tax policies, and workforce development, go to www.wccf.org © WI Council on Children and Families 2009

Check out the WCCF blog @ http://www.wiskids.blogspot.com