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Don't be complacent about lead poisoning

What do Thomas the Tank Engine toys, house paint, and children's costume jewelry have in common? Some may contain lead, a metal that can cause serious brain injury, learning disabilities, and, occasionally, death.

Since the two major sources of lead poisoning, leaded paint and gasoline, were banned in the late 1970's, many parents and professionals have become complacent about the danger this common metal poses. Vigilance is warranted, however, as lead paint remains a hazard in many homes built before 1978 and new dangers are associated with imported toys and personal products.

In the case of Thomas and Friends Wooden Toys, lead was found in certain paints, leading to the recall of 1 ½ million toys, and a great deal of toddler and parent distress. In the case of costume jewelry, a death was reported when a young girl swallowed a leaded metal charm. Subsequently, dangerous quantities of lead were found in many costume jewelry products. In the past lead pigments have been found in some crayons, children's lunchboxes, and painted drinking glasses.

Lead poisoning is easily recognizable when the exposure is severe. The patient may present with severe headaches, seizures, anemia, or coma. At this stage, severe retardation and even death are not uncommon. Since children with mild cases of lead poisoning, however, may appear normal or have only vague symptoms, including abdominal pain, hyperactivity, and anemia, and diagnosis usually occurs only with routine screening tests.

Because clinical diagnoses are difficult to make, Massachusetts's regulations require routine screening blood tests for all youngsters between 9 and 12 months of age, and again at ages 2 and 3. For children from neighborhoods with older homes built before 1978 or where playmates have been poisoned, additional testing may be warranted. Screening is critically important since it is the only way to discover children at risk, before the damage occurs.

Children under 2 are at highest risk because their brains are undergoing rapid growth and development. Even moderate exposure during this critical developmental phase has been shown to lead to language processing problems, hyperactivity, learning disabilities, and behavioral disorders. While treatment can prevent further injury, it cannot repair damage already incurred. Recent studies suggest that for every 10 microgram rise in the blood lead levels there can be a 1-5 point loss in IQ level.

The best and most effective form of treatment is prevention. Be aware of the dangers of lead and make sure the environment is safe:

If you live in, or your child plays in, a home constructed prior to 1978, make sure it is properly tested for lead, inside and out. Even the soil around the exterior of these homes can be extremely dangerous.

If someone in regular contact with your child works with lead or lead products make sure that they wash and change clothes prior to touching your child.

Learn about causes of lead poisoning, other than paint and toys. Water coming through old pipes can be contaminated. Pottery that has not been fired at sufficiently high temperatures and expensive leaded crystal can also leach large amounts of lead into contained liquids.

Older children and adults are also at risk of lead poisoning. This most frequently occurs when home de-leading is attempted by well-intentioned, but inadequately trained, individuals who put themselves and their families at risk.

Lead poisoning is a serious issue for which prevention is the only sure cure. Since children are highly vulnerable and unable to protect themselves, being knowledgeable and vigilant about the dangers lead poses for you and your family is your first line of defense. Information is available online at aap.org or mass.gov.

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