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In February of this year, a four-year-old boy was taken to the emergency department of a Minneapolis hospital due to complaints of vomiting. He was sent home with what was thought to be flu symptoms.

According to the Centers for Disease Control and Prevention's *Mortality and Morbidity Weekly Report*, two days later his family returned with him to the emergency department, this time with vomiting, a "sore tummy", and listlessness. He was admitted to the hospital. The next day, a CT scan was performed revealing a heart shaped object that was later determined to be a foreign body and triggering a request for heavy metal testing. The blood lead level reported the following day was 180 ug/dL. It was on the fourth day of hospitalization that the four-year-old child was removed from life support and died.

The object the child digested was discovered to be a charm used as a promotional item with the purchase of Reebok shoes. Tests on similar Reebok charms showed varying levels of lead up to 67%. According to the Consumer Products Safety Commission, the limit for lead in jewelry is no more than 0.06%. These Reebok charm bracelets were voluntarily recalled on March 23, 2006.

Admittedly, this case is an extreme one and death by lead poisoning is rare. With the removal of lead from fuels and residential paint, we have seen a marked decrease in the levels of lead showing up in children's blood. However, lead poisoning is more common today than most people, including health care professionals, realize.

Lead is a potential hazard to all children, regardless of economic status, as evidenced by nine product recalls that have occurred just since January 1, 2006, due to hazardous levels of lead. These recalls range from bracelets sold by Oriental Trading Company for \$0.50 to ones manufactured by Liz Claiborne and retailing about \$95.00.

Still, with increased attention to an alarming number of consumer products that contain lead, we must be careful not to lose sight of the most common source of lead exposure; lead-based paint and the dust it generates. The older the home is, the greater the chances that lead-based paint is present. Because Indiana ranks 11th in the nation for housing built pre-1950, Hoosier children are especially at risk. Many of these homes that have lead hazards do not appear to be deteriorating. In addition, renovation and remodeling activities of homes built prior to 1978 can pose an even greater risk as paint is disturbed and may not be properly contained.

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Recent research has shown that lead absorption may cause irreversible health effects on children with blood lead levels as low as 5 ug/dL. Without the symptoms that may accompany extreme lead levels to trigger lead testing, at-risk blood lead testing is necessary to identify poisoned children. Risk factors include:

- Living in or regularly visiting a house or child care center built before 1978,
- Siblings or playmates who have lead poisoning,
- Contact with an adult who works in an industry or has a hobby that uses lead,
- Status as a recent immigrant, member of a minority, or Hoosier Healthwise recipient, or
- Use of some folk or ethnic home remedies and cosmetics.

If a child meets any one of the risk categories and is under the age of 7, a blood lead test is necessary.

In order to limit the adverse effects on health and mental development, it is important that we identify those children who have been exposed to lead hazards and remove the sources of exposure. The existing testing rate for at-risk children in Indiana is discouragingly low, as demonstrated in 2004 when 92% of Hoosier children under 7 years old did NOT receive blood lead tests. With such inadequate testing, it is impossible to tell just how many children are being affected.

We simply cannot accept that an estimated 14,000 Hoosier children below the age of 7 years may suffer irreversible adverse effects on their IQs, cognitive abilities, and behaviors that will likely reduce their academic success and lifelong potential.

Actions for Health Care Providers:

- Provide anticipatory guidance in accordance with the American Academy of Pediatrics' policy statement, *Lead Exposure in Children: Prevention, Detection, and Management*.
<http://aappolicy.aappublications.org/cgi/reprint/pediatrics;116/4/1036.pdf>
- Sign up with the Indiana State Department of Health Childhood Lead Poisoning Prevention Program (ICLPPP) to receive training and supplies to perform blood lead testing of at-risk children. Phone: 317-233-1250 E-mail: lead@isdh.in.gov
- Refer families of children under 7 to local health departments for environmental assessments if they indicate they live in a home built prior to 1978.
- Recommend Lead Safe Work Practices when patients' families are considering remodeling and renovations of older homes.
<http://www.hud.gov/offices/cpd/affordablehousing/training/web/leadsafe/keyrequirements/safepractices.cfm>