



2006 Childhood Lead Poisoning Report

Scott County Health Department Lead Program

The Scott County Health Department began the Childhood Lead Poisoning Prevention Program in February of 1977. Currently the Department receives partial funding from the Iowa Department of Public Health (IDPH).

Blood lead testing is done both by the Health Department and by private health care providers in the community.

Children identified with a blood lead level greater than or equal to 10 micrograms per deciliter, will receive medical case management services as appropriate for the blood lead level.

Medical case management may involve follow-up testing, home visits, education, referrals for nutrition education and developmental assessment, and physician referrals for appropriate treatment.

Environmental inspections are conducted by certified elevated blood lead (EBL) inspectors. If a child has 2 venous results between 15-19ug/dL, or 1 venous result greater or equal to 20ug/dL, an environmental inspection will be completed.

The owner/landlord is advised on lead safe practices to remediate the identified lead hazards. Follow-up inspections are done to assure the lead hazards have been remediated.

There are two major demographic factors affecting childhood lead poisoning in a given area. The factors include the percent of pre-1950 housing and the percent of children living in poverty. According to the 2000 Census, Scott County fairs better than the state average when it comes to pre-1950 housing, but has a higher percentage of children in poverty.



Table 1. Percent of pre-1950 housing & children in poverty in 2000.

	Scott County	State Average
Pre-1950 Housing	30.6%	39.3%
Children in Poverty	17.8%	12.9%

Scott County leads the metropolitan counties in Iowa for the highest percentage of children born in 1998 and tested before the age of six years. In 1998, there were 2,175 births and 76.4% of those children were tested for lead before the age of six.

Table 2. Children born in 1995-1998 tested for lead poisoning and were lead poisoned.

	Scott County	State Average
% of children born in 1995-1998 & tested for lead poisoning	73.6%	50.6%
% of children born in 1995-1998 tested & identified as lead poisoned	9.1%	8.8%

Lead poisoning is the single most preventable childhood disease, but one out of seven children in Iowa are lead poisoned. Between July 1, 2004 and June 4, 2005, Scott County providers performed 3,574 blood lead tests on children six years of age or younger. Of those tests, 94.8% fell within an acceptable range of 0-9 µg/dL and 5.2% fell into harmful blood lead levels.

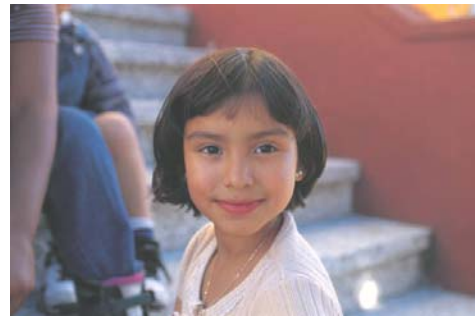
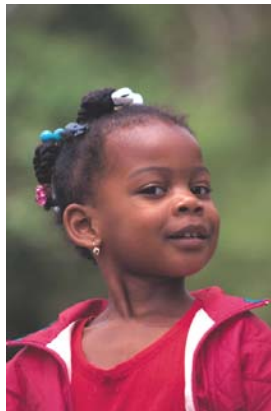


Table 4. Completed Initial Environmental Inspections in Scott County July 1, 2004—June 30, 2005

Number of initial inspections completed within the period	13
Number of homes with hazards	10
Number of remediations completed within this fiscal year	13

Table 3. Selected Blood Test by Level in Scott County July 1, 2004—June 30, 2005

PbB Level µg/dL	Total	Confirmatory
0-9	3391	0
10-14	96	15
15-19	41	2
20-29	33	8
30-44	11	2
45-69	1	0
> = 70	1	0
Total	3,574	27

Where Lead Goes In The Body:

- Lead is a metallic element that is toxic to the brain and nervous system. The body mistakes lead for calcium. If the body does not contain enough calcium and iron, it is more likely to absorb lead. Lead poisoning occurs slowly, resulting from gradual accumulation after repeated consumption.
- Lead that is swallowed is absorbed into the blood from the small intestines.
- 15% of ingested lead is absorbed into soft tissue.
- The other 85% is absorbed into the bones.
- Lead in soft tissues can be flushed out in months, but in bones it takes years.
- Some lead damage is irreversible.

During July 1, 2004—June 30, 2005, private physician offices performed 69.1% of the blood lead tests in Scott County.

Table 5. Locations of lead blood testing in Scott County July 1, 2004—June 30, 2005

County Location	Total Blood Lead Tests	Confirmatory
Community Health Care, Inc.	914	6
Head Start	66	0
Private Physician Offices	2471	7
Scott County Health Department	114	16
Women, Infants, & Children Program (WIC)	9	0



Sources of Lead Poisoning:

Major Source—Deteriorated Paint

The major source of lead exposure is the result of deteriorated paint in older homes and the dust and soil that is contaminated with lead from old paint and from past emissions of leaded gasoline.

LEAD FOUND IN SOME HERBAL REMEDIES:

Hmong-Vietnamese Herbal Remedy:

Pay-loo-ah—a red powder given for a rash or fever.

Asian-Indian Herbal Remedies:

Ghasard—a brown powder given for indigestion

Bala Goli—a round, flat black bean dissolved in “gripe water” and used for a stomachache

Kandu—a red powder used to treat a stomachache

Arab-American Herbal Remedies:

Kohl (Alkohol)—a powder used both as a cosmetic eye make-up and applied to skin infections and the navel of a newborn child

Hispanic Herbal Remedies:

Azarcon—a bright, orange powder given for intestinal illness—also known as Rueda, Coral, Maria Luisa, Alarcon, or Liga



Greta—a yellow powder given for intestinal illness



Chinese Herbal Remedies:

Ba-baw-san—Chinese herbal remedy used to treat colic pain or pacify young children



Other Known Sources of Lead Poisoning:

Jewelry

Reebok Bracelet—Reebok recalled 300,000 eight-inch-long metal promotional bracelets that have a heart-shaped charm with the name “Reebok” engraved on one side after a child in Minnesota died in February 2006 of lead poisoning after reportedly swallowing the bracelet.



American Girl—American Girl Stores recalled in February 2006, necklaces, bracelets, earrings, and hair accessories for girls after they were identified as containing high levels of lead.



Toys

Dollar Tree Toys—The following products were recently recalled from Dollar Tree Stores in February 2006 after they were identified as containing high levels of lead: Mood Necklace and Ring, Glow-in-the Dark Necklace and Ring, and UV Necklace and Ring.



Lunchboxes

Vinyl Lunchboxes—The Center for Environmental Health purchased and tested over 150 soft lunchboxes and found that approximately 10% of them contained high levels of lead. They recommend avoiding vinyl lunchboxes altogether since it is difficult to identify which ones contain lead by looking at them.



Candy

Candy from Mexico—112 distinct brands of candy, most of them made in Mexico, were found to have high levels of lead.



Margarita Dulce de Tamarindo



Recommendations for Physicians

- An environmental history should be taken to identify lead hazards in the child's housing and daycare settings.
- Be aware that special risk groups such as immigrants, international adoptees, and refugees should be screened for lead.
- Question parents on the use of cultural herbal remedies.



Childhood Lead Poisoning Risk Questionnaire

The purpose of the Iowa Department of Public Health's Childhood Lead Poisoning Risk Assessment Questionnaire is to determine the blood lead testing schedule with your patients. The questionnaire is not accurate enough to decide that a child does not need to be tested for lead poisoning.

Research and personal experience have shown that parents may not know the correct answers or may be afraid to give truthful answers to the questions. All children should be tested for lead poisoning according to the Iowa Administrative Code 441-84.3.

To obtain a copy of this questionnaire, you may contact the Scott County Health Department at 563-326-8618 or the Iowa Department of Public Health at 1-800-972-2026.

For more information regarding the Scott County Health Department Lead Program, please contact:

Scott County Health Department
Scott County Administrative Center
428 Western Ave
Davenport, IA 52801
(563)326-8618

or

Visit our website at:
<http://www.scottcountyiowa.com/health>



Sources:

The following is a list of internet resources that were used to obtain data for this report.

- American Girl
<http://www.americangirl.com/recall/>
- Centers for Disease Control & Prevention
<http://www.cdc.gov>
- Center for Environmental Health
<http://www.cehca.org>
- Iowa Department of Public Health
<http://www.idph.state.ia.us>
- U.S. Consumer Product Safety Commission
<http://www.cpsc.gov>
- U.S. Environmental Protection Agency
<http://www.epa.gov/lead>
- Scott County Health Department
<http://www.scottcountyiowa.com>
- The Orange County Register
<http://www.ocregister.com>