

# Who Ya Gonna Call? The "LeadBusters"

## Douglas County Health Department

Childhood Lead Poisoning Prevention Program (402) 444-7825

Spanish inquiries: (402) 444-5555

1819 Farnam Street, Room 400 Omaha NE 68183-0400

Email: [kleinenk@co.douglas.ne.us](mailto:kleinenk@co.douglas.ne.us)

### General Questions/Information/Services in Douglas County Nebraska

- Blood lead tests for children under 7 years
- Follow-up with families when children have been exposed
- Housing lead tests - families with children under 7 Years only - limited availability
- Soil lead tests - limited availability
- Home Maintenance Information & Lead-safe work practices workshops
- Workshops or Speakers for meetings; Displays at Community Health Fairs & Events
- Landlord and Tenant information about Lead – Information about disclosure laws

## Face the Facts: Lead Can Hurt Kids



To Be My Best – I Need A Lead Test!

### Got Lead? Get Help!

**For More Information  
About Lead Tests and  
Lead Paint or Other  
Lead Hazards**

contact

**Douglas County  
Health Department  
Lead Program  
444-7825**

# More Contact Information

## General Information and Soil Tests:

Un. of Nebraska Cooperative Extension in Douglas & Sarpy County

- (402) 444-7804      [http://douglas-sarpy.unl.edu/eh/indoor\\_lead.html](http://douglas-sarpy.unl.edu/eh/indoor_lead.html)

## Brochures, Literature

- DCHD - 444-7825
- National Lead Information Center (NLIC) 1-800-424-LEAD

**Lead Safe Omaha Coalition** - (402) 451-3730      Office: 2505 N 24 St. Ste. 223 Omaha 68110

LSOC Website: [www.lsoc-omaha.org](http://www.lsoc-omaha.org)

## Omaha Lead-Based Paint Hazard Control Program (OLBPHCP)

- City/County HUD grant program for repairs to pre-1978 housing to reduce lead exposure.  
Contact Joyce -(402) 444-5167 for information and applications. Spanish: 444-5555
- Work Smart, Work Wet, Work Clean to Work Lead Safe - Training Programs 444-5167

## Free Paint for home repairs - Douglas County Health Department

Environmental Health Drop & Swap program - (402) 444-7486

## Lead in Drinking Water- Questions for City of Omaha and State

- M.U.D - (402) 554-6666      [www.mudomaha.com](http://www.mudomaha.com)
- Lead In Water Report:      [www.hhs.state.ne.us/puh/enh/pbcuwatr.htm](http://www.hhs.state.ne.us/puh/enh/pbcuwatr.htm)

**NE HHS Lead Paint Certification/Licensure**      (402) 471-0386 or 1-888-242-1100 option 1

- Additional information: [www.hhs.state.ne.us/puh/enh/asbestos/asbindex.htm](http://www.hhs.state.ne.us/puh/enh/asbestos/asbindex.htm)

## EPA investigation - Omaha Lead Site

EPA Region 7, Kansas City, KS 1-800-223-0425

Debbie Kring or Don Bahnke

## Greater Omaha Area - outside Douglas County

Council Bluffs Department of Health - (712) 328-4666

Iowa Department of Public Health - 1-800-972-2026      [www.idph.state.ia.us/fch/eh/lpp.htm](http://www.idph.state.ia.us/fch/eh/lpp.htm)

Lincoln-Lancaster County Health Department - (402) 441-8000      [www.health@ci.lincoln.ne.us](mailto:www.health@ci.lincoln.ne.us)

Nebraska HHS Lead Program - 1-888-242-1100      [www.hhs.state.ne.us/epi/epilead.htm](http://www.hhs.state.ne.us/epi/epilead.htm)

## National Agencies/Organizations and Internet:

[www.aeclp.org](http://www.aeclp.org)      Alliance to End Childhood Lead Poisoning - great links      (AECLP)

[www.hud.gov/lea/leahome.html](http://www.hud.gov/lea/leahome.html)      US Housing and Urban Development      (HUD)

[www.epa.gov/lead](http://www.epa.gov/lead)      US Environmental Protection Agency      (EPA)

[www.cdc.gov/nceh/lead/about/about.htm](http://www.cdc.gov/nceh/lead/about/about.htm)      Centers for Disease Control      (CDC)

[www.cpsc.gov](http://www.cpsc.gov)      Consumer Product Safety Commission      1-800-638-2772      (CPSC)

[www.leadlisting.org](http://www.leadlisting.org)      National Lead Service Providers Listing System      1-888-LEAD-LIST

[www.lead-safeamerica.net](http://www.lead-safeamerica.net)      Lead Safe America      listserv: [LSAmerica-on@mail-list.com](mailto:LSAmerica-on@mail-list.com)

# What You Should Know About Childhood Lead Exposure

## *WHY ARE WE CONCERNED?*

Studies have shown an increased risk for these problems if your child has or had a blood lead level at or above:

10 ug/dL → learning disabilities, developmental problems, lower IQ, hypertension, behavior problems, dental caries

20 ug/dL → nerve problems, slower reflexes

40 ug/dL → anemia

60 ug/dL → kidney damage, stomach aches

80 ug/dL → brain swelling, coma, convulsions

100 or greater → death is possible

Damage from lead exposure may be permanent.

*WHO IS AT RISK IN DOUGLAS COUNTY?* - All children have some risk of lead exposure from many different sources.

- Children with the most risk of exposure are those under 7 years of age who:
  - Live or visit east of 72<sup>nd</sup> Street
  - Live or visit a home built before 1978 that needs repair, is being repaired or renovated, or has the original windows and porch.
  - Put many things in their mouths including toys, fingers, and soil

Douglas County Health Department (DCHD) recommends ALL children have a blood lead test at least once a year through age 3. Children at high risk for lead exposure should continue to be tested yearly through age 6.

Ask your doctor or call DCHD at 444-7825 to schedule a test or receive more information.

## Information for Clinics, Physicians, and Medical Providers

The Douglas County Health Dept. Childhood Lead Poisoning Prevention Program provides the following services to medical providers in Douglas County:

- Medical Office or Clinic Inservice for Staff
- Screening guidelines
  - Medicaid Screening Requirements
  - Targeted Screening Guidelines (see below)
    - Guidelines for testing in Iowa can be found at [www.idph.state.ia.us/eh/lead/TESTPLAN.pdf](http://www.idph.state.ia.us/eh/lead/TESTPLAN.pdf) with a flowchart on page 39 and questionnaire on page 38. Questions can be directed to the Iowa Department of Public Health Bureau of Lead at 1-800-972-2026 or [www.idph.state.ia.us/fch/eh/lpp.htm](http://www.idph.state.ia.us/fch/eh/lpp.htm)
- Lead Specimen Collection Techniques
  - Samples of collection devices
  - Staff Training
- Literature for patient education
- Case Management of all children through age six with blood lead levels  $\geq$  10 ug/dL (all blood lead tests are reportable under NE statute – see below).
  - General patient/family education
  - Co-ordination of care and follow-up testing following CDC guidelines between patient, physician or other primary medical provider, and CLPPP.
  - Family education including a home visit with assessment of possible exposure sources and exposure history. Referrals as needed for follow-up care or intervention (BLLs 15 ug/dL and above).
  - Environmental assessment for lead-based paint with lead hazard reduction follow-up and enforcement (BLLs 15 ug/dL and above).
  - Venous or capillary retesting (at home if needed) at no charge
- Treatment guidelines
  - Retesting Schedules for children with previously elevated blood lead levels and notification to clinic when children are due for retesting
  - Oral Chelation (Chemet) information
  - Medical Staff Advisory contacts – call 444-7825 for names of physicians with experience treating children with elevated blood lead levels

The DCHD CLPPP uses the following documents in developing policies and recommendations:

- Managing Elevated Blood Lead Levels Among Young Children: Recommendations from the Advisory Committee on Childhood Lead Poisoning Prevention (CDC) *March 2002*. [http://www.cdc.gov/nceh/lead/CaseManagement/caseManage\\_main.htm](http://www.cdc.gov/nceh/lead/CaseManagement/caseManage_main.htm)
- Recommendations for Blood Lead Screening of Young Children Enrolled in Medicaid: Targeting a Group at High Risk. Recommendations for Blood Lead Screening of Young Children Enrolled in Medicaid: Targeting a Group at High Risk. *MMWR (Morbidity and Mortality Weekly Report) 2000* (Vol. 49, No. RR-14). <http://www.cdc.gov/mmwr/pdf/rr/rr4914.pdf>
- Screening Young Children for Lead Poisoning: Guidance for State and Local Public Health Officials, Centers for Disease Control and Prevention (CDC, 1997) <http://www.cdc.gov/nceh/lead/guide/guide97.htm>
- Preventing Lead Poisoning in Young Children – 4th revision of the statement on Preventing Lead Poisoning in Young Children by the Centers for Disease Control (CDC, 1991) <http://www.epo.cdc.gov/wonder/prevguid/p0000029/p0000029.asp>
- American Academy of Pediatrics Recommends Targeted Lead Screening Universal Screening in High-Risk Areas <http://www.aap.org/policy/re9815.html>

# Targeted-screening Recommendations from the Douglas County Health Department Childhood Lead Poisoning Prevention Program

In 1991, the CDC recommended universal (yearly) testing of all children through 72 months of age. In 1997, the CDC urged local health departments to determine targeted screening guidelines based on an evaluation of local housing, poverty, and past testing data.

The Douglas County Health Department Childhood Lead Poisoning Prevention Program makes the following recommendations for testing children for lead exposure based on these concerns:

- Studies continue to demonstrate that even low-level exposure can cause damage.
- Children continue to have many different routes of lead exposure in Douglas County.
- A child's risk level is a complex combination of behavioral and environmental factors and can change quickly as the child develops or has a change of environment.
- Children are most at risk 0 to 3 years of age, with risk tapering off through 6 years.
- Most children do not exhibit overt symptoms during lead exposure, but damage can be occurring, with the effects becoming evident once the child is in school
- Until lead exposure can be prevented, children need to be screened to assure sources of exposure are being adequately controlled.
- The best opportunity to positively impact the outcome of lead exposure occurs with early detection and intervention.

## TARGETED SCREENING GUIDELINES FOR DOUGLAS COUNTY NEBRASKA FEBRUARY 1998 (UPDATE NOVEMBER 2001)

- Health providers should use a blood lead test to screen all children at approximately 12, 24, and 36 months of age, or at the first visit after 9 months if no prior test record available.
- Children between 36 and 72 months of age should be assessed for risk of present and past exposure using the attached questionnaire. Any question answered yes or unknown should trigger a blood lead test.
- Every time a child accesses care, providers should evaluate risk and need for testing.
- Children with a change in their risk status (renovations, change of address for family or caregivers, etc.) and those children observed mouthing or ingesting items of concern may benefit from additional screening.

Children that have had a prior test  $\geq$  10 ug/dL should be retested as recommended in the CDC guidelines for responding to blood lead levels in children, 1991 and 1997.

All lead tests are reportable in Nebraska and are to be reported to the state or local health department. Guidelines for case management of EBLs, reporting, and other information regarding childhood lead poisoning are available from:

**Douglas County Health Department Childhood Lead Poisoning Prevention Program  
1819 Farnam, Room 400, Omaha, NE 68183 (402) 444-7825**

# Childhood Lead Exposure Risk Questionnaire -Douglas County NE

Name of Child \_\_\_\_\_ DOB \_\_\_\_\_

- 1a. Is the child less than 36 months old? **Yes No Unknown**
1. Has this child **lived** in or **regularly visited** a house located in any of the following Zip Codes during the past **two years**? This could be their home, daycare, a relative's home, etc. If yes, circle which one? (Douglas County only) **Yes No Unknown**
- |              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|
| <b>68102</b> | <b>68104</b> | <b>68105</b> | <b>68106</b> |              |
| <b>68107</b> | <b>68108</b> | <b>68110</b> | <b>68111</b> |              |
| <b>68112</b> | <b>68117</b> | <b>68131</b> | <b>68132</b> | <b>68152</b> |
2. Has this child participated in WIC, food stamps, ADC, Head Start, Medicaid, Kids Connection, OHA or Section 8 housing, or any other **public assistance program** or free clinic (or is this child in need of assistance or health insurance coverage, but is not covered at this time)? Is this child in foster care? **Yes No Unknown**
3. Does this child **live in or regularly visit** a house built **before 1950**? Does the house have a porch where the child spends time? **Yes No Unknown**
4. Does this child **live in or regularly visit** a house built **before 1978** that has been **renovated, painted, or remodeled within the last 6 months**? **Yes No Unknown**
5. Does this child have any brothers or sisters, housemates, or playmates that have or did have a blood lead level of 10 ug/dL or higher? **Yes No Unknown**
6. Does this child **often put things other than food into his or her mouth**, such as sucking a thumb or fingers, keys, toys, household items, stones, or dirt? Do they put their mouth on window ledges, furniture, or other objects? **Yes No Unknown**
7. Does this child live with an adult whose job or hobby may involve exposure to lead? (Examples include construction, pottery work, stain glass, soldering, plumbing, auto repair, battery plants, painters, lead smelters, etc.) **Yes No Unknown**
8. Has this child **lived or visited** for more than a month **outside the United States**? Does the child eat candy made in Mexico? **Yes No Unknown**
9. Does the family use a bean pot, pottery, ceramic-ware, or antique dishes for cooking, eating, or drinking? **Yes No Unknown**
10. Has this child ever been tested for lead? **Yes No Unknown**  
When \_\_\_\_\_ Where \_\_\_\_\_ Result \_\_\_\_\_

**Any Yes or Unknown answer (other than #10) should generate a blood lead test for this child if no testing done within prior 9-12 months. Follow up any previous lead levels  $\geq 10$  as recommended by CDC guidelines.**

**Classes of Lead Exposure  
DCHD Lead Program Response  
based on CDC Guidelines (1991 & 1997)**

<b>Blood Lead Level (BLL)</b>	<b>Class</b>	<b>DCHD Lead Program Response And Clinic Recommendations</b>
<b>0 – 9 ug/dL</b> capillary or venous	<b>Class I</b>	<ul style="list-style-type: none"> <li>◆ Safest level, retest yearly until 6 years of age (low risk – 3 years of age)</li> <li>◆ Retest sooner or more often if lead exposure risk increases</li> <li>◆ If immediate prior BLL <math>\geq</math> 10, retest 6 months to monitor continued exposure</li> </ul>
<b>10 –14 ug/dL</b> capillary or venous	<b>Class IIa</b>	<ul style="list-style-type: none"> <li>◆ DCHD case management begins – info mailed to home, services offered.</li> <li>◆ Clinic should retest within 3 months, capillary or venous BLL</li> </ul>
<b>15 – 19 ug/dL</b> if capillary, confirm with venous within 1 month	Class IIb	<ul style="list-style-type: none"> <li>◆ When confirmed, DCHD visits home, conducts education, risk and environmental assessment, coordinates follow-up with inspector, clinic, family, and DCHD case management</li> <li>◆ Clinic should retest in 2 months with venous BLL</li> <li>◆ Periodic evaluation needed for behavior and developmental impairment</li> </ul>
<b>20 – 44 ug/dL</b> if capillary, confirm with venous within 1 week	<b>Class III</b>	<ul style="list-style-type: none"> <li>◆ When confirmed, DCHD visits home (above)</li> <li>◆ Child referred to physician, who evaluates status and may consider oral chelation dependent on BLL, age of child, and length of exposure.</li> <li>◆ Clinic should retest in 1 month with venous BLL</li> <li>◆ Periodic evaluation needed for behavior and developmental impairment</li> </ul>
<b>45 – 69 ug/dL</b> if capillary, confirm with venous within 48 hours	<b>Class IV</b>	<ul style="list-style-type: none"> <li>◆ When confirmed, DCHD visits home (above)</li> <li>◆ Referral to physician for evaluation and oral chelation</li> <li>◆ Retest after chelation to establish trough (immediate S/P medication) and rebound (1 mo. S/P medication) BLL; Retest and retreat as appropriate</li> <li>◆ Periodic evaluation needed for behavior and developmental impairment</li> </ul>
<b><math>\geq</math> 70 ug/dL</b> if capillary, redraw venous <b>STAT</b>	<b>Class V</b>	<ul style="list-style-type: none"> <li>◆ Medical Emergency – child admitted for observation pending results of confirmation or hospitalized for evaluation and IV or IM chelation.</li> <li>◆ DCHD <b>must</b> evaluate home and environment for lead exposure prior to child’s discharge.</li> <li>◆ Retest and retreat as appropriate</li> <li>◆ Periodic evaluation needed for behavior and developmental impairment.</li> </ul>

## Blood Lead Test Reporting to the Douglas County Health Dept.

As of July 1997, Nebraska Department of Health and Human Services Regulation and Licensure/Control of Communicable Disease/Regulations requires the reporting of ALL blood lead tests under Title 173 Chapter 1. Revisions went into effect 1-28-01.

**As the designated local health department for Douglas County**, reports of blood lead levels from your facility need to be made to:

Douglas County Health Department (DCHD)  
Childhood Lead Poisoning Prevention Program (CLPPP)  
1819 Farnam St. Room 401  
Omaha, NE 68183-0401  
Attn: Reid Steinkraus, supervisor [rsteinkr@co.douglas.ne.us](mailto:rsteinkr@co.douglas.ne.us)  
Kathy Leinenkugel, program coordinator [kleinenk@co.douglas.ne.us](mailto:kleinenk@co.douglas.ne.us)  
Phone: (402)444-7825 Fax: (402)444-6267

### **The following laboratories currently report lead results to DCHD CLPPP:**

Public Health Lab/Regional Lab at Nebraska Health System  
Creighton Medical Lab at St. Joseph  
Physicians Laboratory  
Quest  
ARUP (report made to Nebraska HHSS)  
Smith Kline Beecham  
Medtox

DCHD CLPPP has set up reporting protocols with these laboratories to capture results and demographics as required under state law. **Please note 1-004.01C3 and 1-004.02C2 regarding minimum demographic information required in reporting.** Remember - the lab can not report address or racial/ethnic information if the health care provider that obtains the specimen does not provide it to the lab. If possible, also include the parent/guardian name, phone number, and language preference if known to facilitate case management.

**DCHD requires all physicians and clinics to provide demographic information on patients tested for lead directly to DCHD CLPPP unless the required information is provided to a laboratory named above, which will forward the information to DCHD CLPPP.** This information can be sent to DCHD CLPPP using Attachment A, Attachment B, copies of the lab requisition or report, or by another form or method approved by DCHD CLPPP that includes all the required demographics. Contact DCHD CLPPP at the above number to make arrangements for reporting from your practice.

**Note:** Although reporting is due weekly, delays in the system have caused results to be reported up to two months after the date of testing. If you have a child with a venous blood lead level over 15 ug/dL, please call our office as soon as possible to initiate follow-up by our program in a timely manner.

## LEAD TESTING EXCERPTS

Excerpted below are the parts of the regulations pertaining to Blood Lead Testing. A complete copy of the regulations is available from HHS, Douglas County Health Department, or electronically over the internet at [www.hhs.state.ne.us](http://www.hhs.state.ne.us) (go to [www.hhs.state.ne.us/reg/t173.htm](http://www.hhs.state.ne.us/reg/t173.htm) then Chapter 1).

### **1-002 WHO REPORTS:**

1-002.01 Health Care Providers: Physicians and hospitals shall make reports of communicable diseases and poisonings as described in 173 NAC 1-004.01 and 173 NAC 1-005; unless a report is made under 172 NAC 1-002.01A or 1-002.01B.

1-002.01B REPORTING LEAD ANALYSIS: If a laboratory performing lead analysis provides a report containing the required information to the department, the physician and hospital are exempt from 173 NAC 1-002.01.

1-002.02 LABORATORIES: Laboratories shall make reports as described in 173 NAC 1-003, 173 NAC 1-004.02 and 173 NAC 1-002.01.

### 1-003 REPORTABLE DISEASES, POISONINGS AND ORGANISMS: LISTS AND FREQUENCY OF REPORTS:

1-003.02 REPORTS WITHIN SEVEN DAYS: The following diseases, poisonings and organisms shall be reported within seven days of detection or diagnosis:

.....Lead Poisoning (all analytical values for blood lead analysis shall be reported);  
.....

### **1-004 METHODS OF REPORTING:**

#### 1-004.01 Health Care Providers

##### 1-004.01C Reports Within Seven Days:

Health care providers shall make reports of diseases, poisonings and organisms, listed in 173 NAC 1-003.02, within seven days of diagnosis or detection.

1-004.01C1 Except for lead analysis and AIDS and HIV disease, reports can be made by postal service, telephone, facsimile or other secure electronic mail system, submitted on or including the same information as Attachment A. Health care providers shall ..... report lead analysis as described in 1-004.01C3. See 173 NAC 1-005 Where to Report.

1-004.01C3 Reporting Lead Analysis: Health care providers shall report the following information to the department: the date of sample collection and analysis; whether the sample is a capillary or venous blood sample; the date of birth, address, and sex of the patient; and the name and address of the physician. Race and ethnicity of the patient should be reported if known.

1-004.02 Laboratories:

1-004.02C Reports Within Seven Days: Laboratories shall make reports of diseases, poisonings and organisms diagnosed or detected, listed in 173 NAC 1-003.01B, collected during one calendar week. Reports will be submitted no later than the following Tuesday and submitted on or include the same information as Attachment B. Laboratories shall make reports by postal service, telephone, facsimile or other secure electronic mail system.

1-004.02C2 Reporting Lead Analysis:

Laboratories shall report the following information to the department: the date of sample collection and analysis; whether the sample is a capillary or venous blood sample; the date of birth, address, and sex of the patient; and the name and address of the physician. Race and ethnicity of the patient should be reported if known.

1-004.03 When health care providers and laboratories do not have complete information, as shown on Attachments A,B, C, D or E or as required regarding lead analysis, the designated official from the official local health department of Nebraska Department of Health and Human Services Regulation and Licensure may contact the health care provider or laboratory to obtain the missing information.

**1-005 WHERE TO REPORT:**

1-005.01 CASES REPORTED BY HEALTH CARE PROVIDERS AND LABORATORIES:

Except as stated for AIDS and HIV reporting in 173 NAC 1-005.01A, reports are to be made to the local health department if the area is served by an approved local full-time health service as defined in Neb. Rev. Stat. Section 71-1626, and where the health director of the service has specified this method of reporting. In all other areas, the reports are to be made directly to the Nebraska Department of Health and Human Services Regulation and Licensure.

# KEEPING YOUR CHILD SAFE FROM LEAD IN PRODUCTS

Products Made in the US and made to be used by children

- ◆ Must meet minimum safety standards
- ◆ Example: Crayola Crayons

Products Made in the US and made to be used by adults

- ◆ Must be labeled as potential hazard if known
- ◆ Example: Grecian Formula, Decorative dishes
  - ◆ Recent items making the news for possible violations of labeling laws: candle wicks, keys

Products Made outside the US for distribution here:

- ◆ Voluntary compliance
  - ◆ If meets US safety codes, may contain a packaging label such as "Conforms to ASTM 4236." Should be safe to use.
    - ◆ Example: Penway Crayons
  - ◆ Some other labels seen that may indicate a safe product:
    - ◆ non-toxic
    - ◆ safe for small children
    - ◆ does not contain lead
  - ◆ Products may be evaluated for "bio-availability" of lead and other possible toxins under normal use conditions. If no apparent hazard is found, no labeling is required.
- ◆ If a product is found to be a hazard after distribution, an advisory or a recall may be issued.
  - ◆ Examples: Nike Little Air Jordan, artist paint brushes, Mulan and Barney Backpacks, WWJD metal necklaces
  - ◆ Plastics rule of thumb: the brighter, more vivid the color, the greater the chance of lead being used during manufacturing.

Route of Exposure - Lead must have a way to get into the body to be a problem

- ◆ Direct "mouthing" or chewing on items
- ◆ Food preparation, serving, or storage products can leach lead from designs, glazes, plastics, pewter, brass, lead crystal
  - ◆ acid foods like apple sauce, juice, tomato-based foods
  - ◆ breakdown of the surface from repeated use, wear, improper use

1. **READ LABELS BEFORE PURCHASE** - Look for safety codes
2. **USE YOUR BEST JUDGEMENT IN CHOOSING ITEMS** - Choose one that has a safety label over one that does not have any labeling
3. **USE THE ITEM CORRECTLY** - If it says not to microwave or wash in a dishwasher, don't. If it is made to be used by an adult, don't let a child play with it.
4. **DISPOSE OF OR LIMIT THE USE OF ITEMS THAT MAY PRESENT A HAZARD**
5. **DON'T GIVE YOUR TODDLER ITEMS TO CHEW ON THAT WERE NOT MADE FOR THAT PURPOSE** - keys, jewelry, and household decorative knick-knacks.

# SOIL LEAD FACTS

DOUGLAS COUNTY HEALTH DEPARTMENT  
CHILDHOOD LEAD POISONING PREVENTION PROGRAM

SPRING 2002

Testing by the Douglas County Health Department and the EPA has found some soil lead levels in Douglas County to be elevated. These areas are most likely to be found near pre-1978 housing and near current or prior industrial sites. Elevated soil lead levels may require property or homeowners to take special steps to reduce the risk of exposure. The following guidelines are offered to those who live in areas that may have elevated soil lead levels and for people who grow produce in their gardens in these areas.

## **Lead must have a way to get into the body for it to cause damage**

If soil contains lead, the biggest risk of exposure is through eating or swallowing contaminated dirt. Young children (2-3 years of age) are at the highest risk for this exposure route. Normal activities at this age include playing in dirt and putting their hands and other objects into their mouths. This increases the chances that children will ingest small amounts of lead on a regular basis. When a child repeatedly has exposure, the lead can accumulate in their body faster than their body can get rid of it, and may reach levels that can cause damage.

## **AREAS AROUND YOUR HOME WHERE YOU SHOULD BE CONCERNED**

Play areas and gardening activities should not be located in these areas unless shown to be lead-safe:

- ① The soil around the house foundation (in pre-1978 housing) where lead paint chips and dust may be in the soil. If the house has been sandblasted or pressure washed, the contaminated area can extend out farther from the house.
- ① Soil areas around painted structures such as garages, sheds, and fences may have elevated lead levels.
- ① Soil areas close to heavily traveled roads or gas stations may have elevated levels from prior leaded-gasoline emissions or spilled gasoline.
- ① Soil areas close to past or present industrial sites.
- ① Soil areas near metal structures such as bridges and water towers that are often painted with lead paint.

## **SHORT TERM ACTIONS TO REDUCE SOIL LEAD HAZARDS**

These actions – followed carefully – will help protect children. The actions must be maintained to insure that the contaminated soil remains covered and barriers remain intact.

### **Do not let children or pets play or have contact with lead contaminated bare soil.**

- Children can get lead poisoning by ingesting lead dust on their hands, on toys, and on objects they put in their mouths. Some children may eat dirt.
- Pets can ingest lead-contaminated soil and become lead poisoned. They can also carry lead-contaminated soil on their fur. This soil can be tracked into the home or transferred to a child's hands.

### **Prevent access to lead-contaminated soil by children and pets.**

- Put fencing or barriers around bare soil areas
  - Cover bare soil with six inches of lead-free wood chips, mulch, soil, or sand

### **Put washable doormats or rugs at all entries to your home and wash the mats every week.**

- Doormats and rugs will trap some lead-contaminated soil before it is tracked into the home
- Wash mats or rugs weekly to remove accumulated lead dust

### **Remove shoes before entering your home.**

- Shoes can carry lead-contaminated soil into your home.
- Bare feet can also track in lead-contaminated soil, and should be washed before coming inside from outdoor play.

**Clean all washable floors at least weekly with a household cleanser.**

- Follow the label directions.
- Exchange the rinse water frequently.
- Pour dirty water down the drain or toilet. Do NOT pour on soil outdoors or on plants.
- Consider replacing carpeting with non-porous flooring, such as linoleum, tiles, or wood. Non-porous flooring can be cleaned better than carpeting, which traps lead dust.

**Wash children's toys frequently with soap and water.**

- Toys that are used outside should always be washed before they are brought into the home.
- Toys or objects that children put in their mouths should be washed every time they come in contact with soil.

Wash children's hands frequently, especially before activities where they often put their hands or fingers in their mouths.

- Meals and snacks – use extra caution during outdoor picnics
- Sleeping and naptime

## **GARDENING GUIDELINES**

### **Soil Lead Levels < 400 ppm**

- Discard old and outer leaves of vegetables. Peel root crops before eating. Do NOT compost these materials. Wash all vegetables with a 1% vinegar in water solution (1 to 2 oz. of vinegar in 1 gallon of water) or soapy water (taking care to rinse the soap off prior to consumption). There is more concern about lead contamination from the dirt on the exterior surfaces of unwashed produce than from the amount of lead absorbed by the plant itself.
- Locate gardens away from roads, driveways, old painted structures, potential lead sources, and old garbage dump sites. Lay out gardens to keep leafy greens and other hard-to-wash vegetables far from potential lead sources.
- Give planting preference to fruiting crops (tomatoes, peppers, squash, cucumbers, peas, beans, corn, etc.) rather than leafy vegetables such as lettuce and spinach or root crops such as carrots and radishes.
- Add organic matter to your soil, such as peat moss, compost, and manure. Organic compounds bind lead and make it less available to the plants. Suggested amounts: add three to four 4 cubic feet bales of peat moss to a 100 sq. foot garden plot.
- Maintain the soil pH above 6.5. It is hard for plants to uptake lead when the soil pH is above this level. Lead is also less available to plants when soil phosphorus levels are high.

### **Soil Lead Levels 400-1000 ppm - Follow the above practices and also:**

- Avoid growing leafy vegetables and root crops in this soil. Grow these crops in raised beds or containers with lead free soil.
- Topsoil of this kind can be purchased from nurseries and garden stores.

### **Soil Lead Levels > 1000 ppm**

- Do NOT garden in this soil
- Install raised beds or try container gardening

### **What about soil that has not been tested for lead?**

- Assume the soil may have some lead contamination if it is in an area by housing built before 1978 or near past or present industrial sites. Use the above suggestions as a guide to reducing lead exposure.
- Consider having the soil tested for lead, especially if the buildings on the property were built prior to 1978, children under 7 years of age play in bare soil on the property, or you have a vegetable garden.

**For more information on soil lead contact:  
Nebraska Health and Human Services Lead Program @ 888-242-1100  
Douglas County Health Department Lead Program @ 444-7825  
1819 Farnam St. Room 400 Omaha NE 68183**

## **The Douglas County Health Department Childhood Lead Poisoning Prevention Program offers free inspections to families in Douglas County living in pre-1978 housing where children under 7 years of age spend time on a regular basis.**

Families with children who have been designated as having elevated blood lead levels are given first priority. At the current time we have a 3-4 month backlog for other inspections. You can contact our office to get on a waiting list.

You can still be pro-active in protecting your family from unnecessary lead exposure.

Here are some general guidelines.

- ① Lead-based paint was banned for use in housing in 1978, so homes built after that date should be almost free of lead-based paint.
  - ☑ Because lead exposure can occur from sources other than lead-based paint, children should be tested for lead at 1,2, and 3 years of age.
  - ☑ Children 3-7 years of age can use a questionnaire to help determine the need for additional blood lead testing
  
- ① Homes built between 1960 – 1978 may contain various levels of lead-based paint, but levels of lead are usually low compared to older housing.
  - ☑ Renovation or repair work should be done using lead-safe work practices.
  - ☑ Pregnant women and children under 7 years should not do renovation projects or be present during the work.
  - ☑ Surfaces should be washed off weekly to reduce the buildup of lead dust.
  - ☑ Children under 7 years should be tested yearly as a precaution.
  
- ① Homes built between 1950 – 1960 usually will contain some lead-based paint. The condition of the home and painted surfaces affects how hazardous the paint is to your family. You need to be aware of how you can protect your family.
  - ☑ Renovation or repair work should be done using lead-safe work practices.
  - ☑ Pregnant women and children under 7 years should not do renovation projects or be present during the work.
  - ☑ Surfaces should be washed off weekly to reduce the buildup of lead dust.
  - ☑ Children under 7 years should be tested yearly as a precaution.
  
- ① Homes built before 1950 almost always contain some lead-based paint, even if the home has been renovated in the past. Some of the paint used before 1950 was 50% lead by weight, so even a little of this paint can cause a lot of lead dust or lead hazards to families, especially children under 7 years of age. Special areas of concern are windows and porches, and any chipping, peeling, or flaking paint of the interior or exterior of the home.
  - ☑ Renovation or repair work should be done using lead-safe work practices.
  - ☑ Pregnant women and children under 7 years should not do renovation projects or be present during the work.
  - ☑ Surfaces should be washed off weekly to reduce the buildup of lead dust.
  - ☑ Children under 7 years should be tested yearly as a precaution.

**For More Information,  
Contact the Douglas County Health Department Lead Program  
444-7825**

## Kick Lead Dust Out !!!



*The saying "Dirt Don't Hurt" may be true,  
But Lead Poisoning can seriously hurt you!*

### Reduce Your Child's Exposure To Lead Dust

- **Cleaning** - Use disposable towels and soapy water to wash areas, then rinse with clear water and throw away towels.
  1. Daily wash any toys or objects your child/children place in their mouths.
  2. Wash toys that are used outside before bringing them indoors.
  3. Weekly wash windowsills and other hard surfaces in your home.
  4. Always wet mop hard surface floors - do not use brooms or vacuums on hard surfaces. If possible use vacuums with HEPA filters for carpeting.
  
- **Helpful Items**
  1. Use washable doormats/rugs in areas of heavy traffic such as the front and back doors. This helps to keep lead dust on shoes from entering your home.
  2. Yard soil may be contaminated with lead. Discourage children from playing in dirt areas close to the house foundation. Have children play in safe soil/sand areas. Safe areas include sandboxes or plastic wading pools filled with purchased lead free soil or sand.
  3. Use a blanket/quilt as a protective barrier between any lead dust in your carpet and your child. Lay the blanket over carpet in areas the child plays or watches television. Weekly wash blankets.
  4. Put a reminder sign in you kitchen stating the importance of regular hand washing for both parents and children, especially before eating or handling food (even one cookie 😊).