



KANSAS
Healthy HOMES
AND LEAD HAZARD PREVENTION PROGRAM

Program Report 2007 thru 2008

“Protecting the health and environment of all Kansans by promoting responsible choices.”



This report is an overview for 2007-2008 blood lead testing on Kansas residents. The medical surveillance work for children described herein is funded by cooperative agreement award #1-H64-EH000158-02 from the US Center for Disease Control and Prevention (CDC).

Program

The Kansas Department of Health and Environment (KDHE) established the Kansas Childhood Lead Poisoning Prevention Program (KCLPPP) to respond to concerns about lead and its effect on the health of Kansans, most notably our children.

In 2007, the KDHE Lead Advisory Committee recommended changing the program name and expanding the scope of services to include all aspects of healthy homes. The KDHE Healthy Homes and Lead Hazard Prevention Program is tasked to assist Kansans in protecting themselves from hazardous environmental health exposures. The program acknowledges the association between human health and housing and in keeping with the direction of federal partners. Our primary objective continues to be lead poisoning prevention yet we have expanded our efforts to help identify and address additional healthy homes hazards such as carbon monoxide, mold, radon, pest control, household asbestos, as well as injury prevention and safety.

The mission of the KDHE Healthy Homes and Lead Hazard Prevention Program (HHLHPP) is to promote healthy and safe environments for families in Kansas through awareness, education and reduction of environmental hazards in their homes.

HHLHPP activities reflect and promote KDHE's mission to protect the health and environment of Kansans by promoting responsible choices. The program is divided into four operational sections: Medical Surveillance for children and adults, Lead Profession Licensure and Certification, Building Contractor Pre-Renovation Education and Project Lead Safe KCK a program administered HUD Lead Hazard Control program.

The Medical Surveillance section monitors and promotes all blood lead screening within the State. Children ranging in age from six months to 72 months are considered the highest at risk age group for poisoning. The adult workforce in Kansas has one of the highest incidences of lead poisoning of any state in the US. This portion of the program is active in increasing primary prevention activities to reduce lead hazard exposure; as well as providing follow up and case management (medical and environmental) to children and adults with elevated blood lead levels. This section also coordinates all environmental investigations which are crucial activities performed to determine the source(s) of lead poisoning.

The Lead Profession Licensure and Certification section performs numerous regulatory functions. All licensing of lead activity firms and certifying of individuals to perform lead abatement work, lead inspections, risk assessments and other regulated activities are handled by this group of train professionals. Contractor Pre Renovation Education is a regulatory requirement. Staff functions include primary prevention through outreach and education helping the public as well as general contractors and landlords understand the risks and hazards associated with remodeling and renovation of housing built before 1978.

The Project Lead Safe KCK section has worked for the past 5 years to identify housing units in Wyandotte County, Kansas where lead poisoning is likely to occur and work with owners to eliminate the lead hazards in those units.

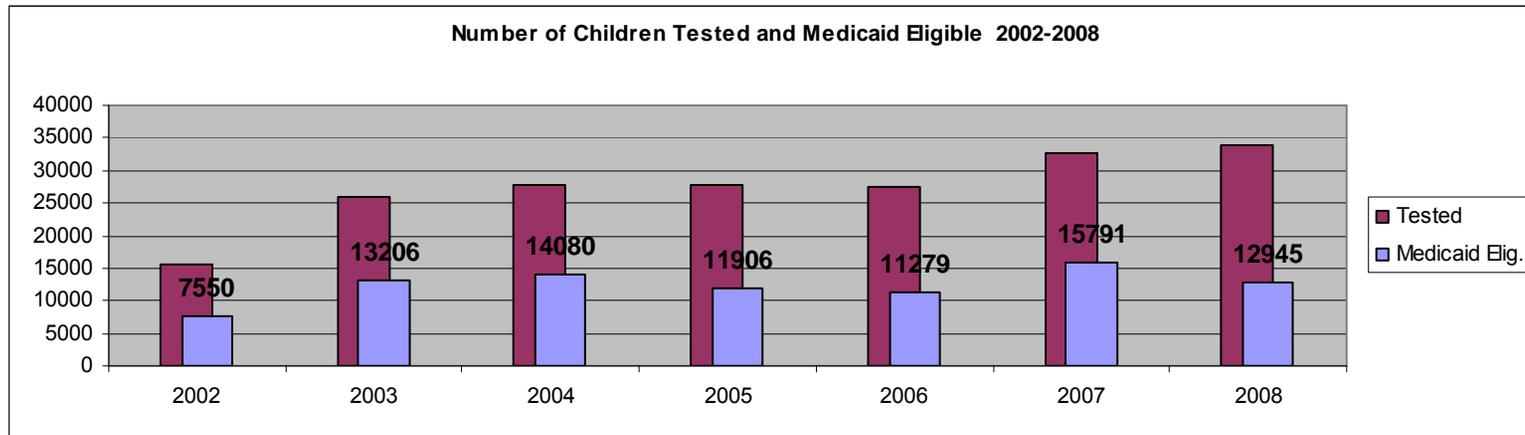
During 2004, our program developed and began implementation of a plan to eliminate lead poisoning by in Kansas 2010. The elimination plan focuses its goals and objectives on two major areas of health and housing and five essential components. Goals and objectives were developed to address the challenges found in each focus area, followed by strategies and activities that would help reach elimination of lead poisoning in Kansas.

Housing Goal: To eliminate lead hazards from where children live, play, and visit by providing a mechanism to allow the public to make lead-safe housing choices.

Health Goal: To increase the number of children <72 months of age that have received a blood lead test.
To decrease the % of children tested whose blood lead levels are $\geq 10 \mu\text{g/dL}$.

Medical and Environmental Surveillance

The Kansas Healthy Homes and Lead Hazard Prevention Program currently receives blood lead test¹ results from 18 laboratories both public and private and 6 facilities that use the LEAD-Care II™ Machines. Blood lead surveillance data presented in the following tables represents children < 72 months of age, who were tested for lead at least once during calendar years 2007 and 2008. To increase and maintain identification of Medicaid eligible children, HHLHPP performs monthly data matches with Children’s Mercy Family Health Partners and Unicare, the two contracted Medicaid agencies in Kansas.



Number of children with at least one blood lead test during year (Medicaid eligible and Non-Medicaid Eligible).

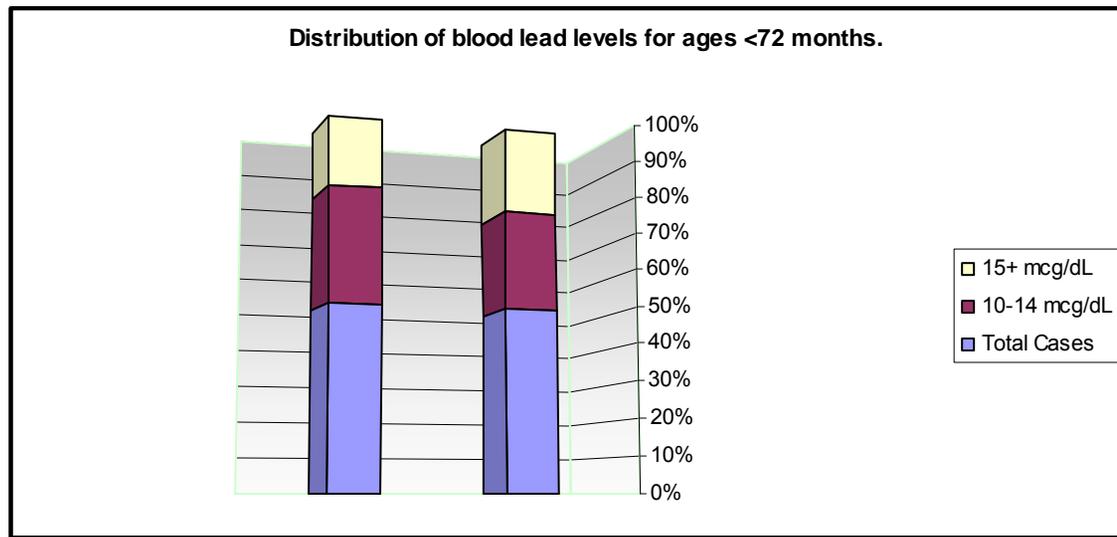
¹ Test: Any blood lead test (capillary, venous, filter paper, or unknown sample type) on a child that produces a quantifiable result and is analyzed by a CLIA-certified facility or an approved portable device. A blood lead may be collected for screening, confirmation or follow-up.

Lead Poisoning Cases in Kansas

A child identified as lead poisoning will receive case management from their private provider, their local health agency and the HHLHPP. Case management includes: nutritional and lead hazard control education, continued monitoring of the child's blood lead level, an environmental investigation to identify the source of lead exposures, and identification and education of other health hazards in their home environment. In 2007, Kansas recorded 188 new lead poisoning cases. Of those 69% of the cases were in children between 0-2 years of age. In 2008, Kansas identified 140 new lead poisoning cases. Once again 68% of the cases affected children between 0-2 years of age. The chart below also reflects that in 2007, 37% of the identified cases recorded blood-lead levels greater than 15ug/dL in 2008 that percentage rose to 46%.

Kansas identifies lead poisoning in children when one of the following criteria is met:

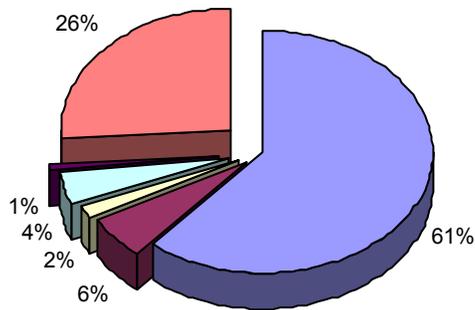
- ✓ One venous draw blood test indicating a BLL ≥ 10 ug/dL, **or**
- ✓ Two (capillary or filter paper) blood tests recording BLLs of ≥ 10 ug/dL within a 12 week period.



Case Management & Environmental Investigations

The Kansas Healthy Homes and Lead Hazard Prevention Program and contracted environmental investigators conduct in-home investigations to identify lead and other healthy homes hazards in the child's environment and educate parents and homeowners about risk reduction to make the home safer. The chart below shows status of environmental investigations for 2007 and 2008. Participation is voluntary. Not all families chose to have the investigation performed. HHLHPP completed 61% of the eligible environmental investigations for 2007 and 72% for 2008

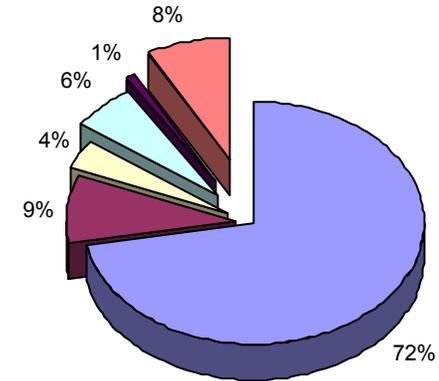
Percent of Environmental Investigations by Completion Status for 2007



■ Complete ■ Refused ■ Unable to Locate ■ Moved ■ SRS Custody/Refugee ■ Other Reason

Total for 2007 = 179

Percent of Environmental Investigations by Completion Status for 2008



■ Complete ■ Refused ■ Unable to Locate ■ Moved ■ SRS Custody/Refugee ■ Other Reason

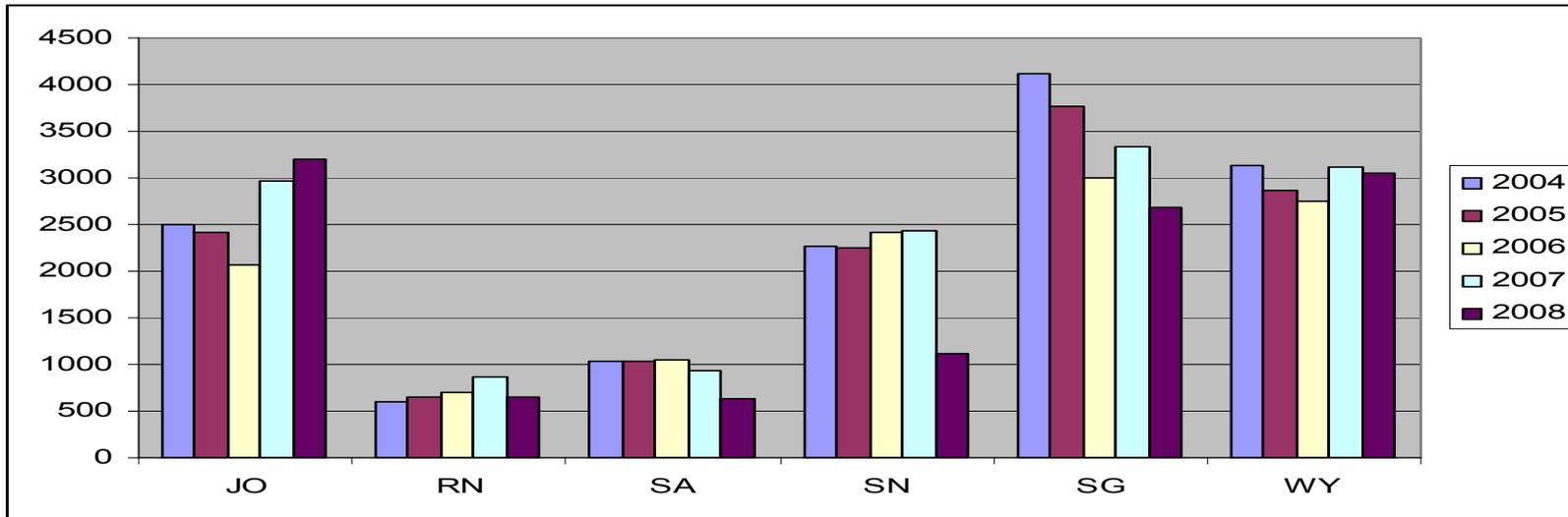
Total for 2008 = 158

Targeted Screening

In 2001, the program developed a targeting model to determine ‘High Risk’ areas for lead poisoning within our state. The model considered four-census variables:

- 1) Density of pre-1960 housing,
- 2) Density of minority population,
- 3) Density of impoverished population, and
- 4) Density of population age 5 and under.

Utilizing the targeting model and testing data recorded by the program, GIS maps were developed to identify High Risk areas with the goal of concentrating efforts to reduce lead poisoning in those areas. The first sets of maps was developed in 2003 and are updated annually with testing information to ensure proper program activities are being implemented in these areas. Ongoing testing and screening events occur in the High Risk areas as a continuing effort to indentify lead poisoned children.



Total children tested within high-risk counties over the last seven years.

Six high-risk counties: Johnson County (JO), Reno County (RN), Saline County (SA), Shawnee County (SN), Sedgwick County (SG), and Wyandotte County (WY).

Medical Surveillance- Analysis of Adult Data

Kansas Healthy Homes and Lead Hazard Prevention Program participates in the Adult Blood Lead Epidemiology and Surveillance (ABLES) program for the National Institute for Occupational Safety & Health (NIOSH). The program has collected data, monitored elevated blood lead levels in adults and provided outreach to adults at risk of lead poisoning due to occupational or other associated lead hazards. Adults with blood lead levels at or above 25 µg/dL are contacted by HHLHPP to gather additional information on exposure sources and provide assistance in obtaining any required medical attention if desired.

The lead surveillance data presented in figure 1 below represents adults ≥18 years of age who were tested for lead at least once during calendar years 2007 and 2008. Adult blood lead data is retained in a KDHE surveillance system known as the ABLES Database. Figure 2 represents the prevalence rates for all states participating in ABLES (Source NIOSH).

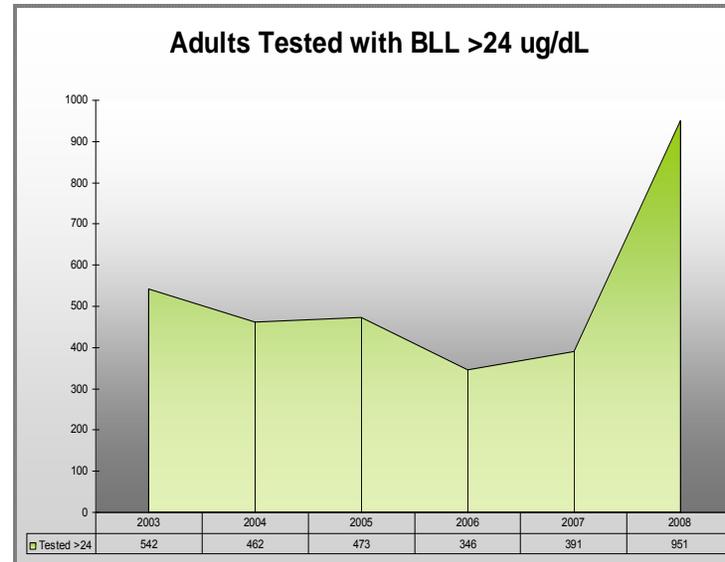
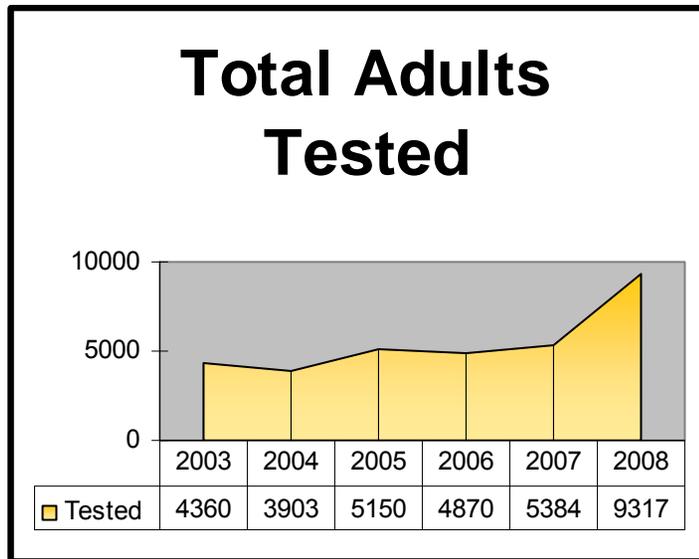
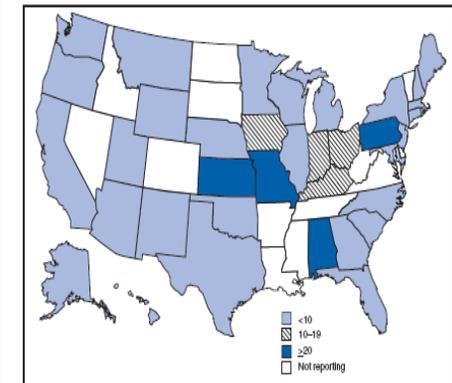


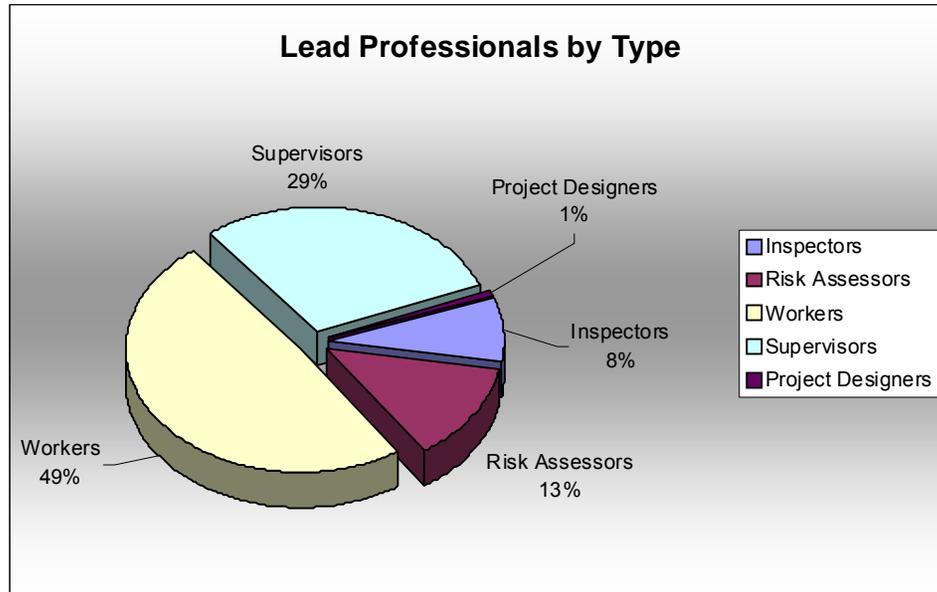
FIGURE 2. Prevalence rates* for resident adults with peak blood lead levels ≥25 µg/dL, by state — Adult Blood Lead Epidemiology and Surveillance program, United States, 2003–2004 annual average



* Per 100,000 workers aged ≥16 years. Estimates based on 2005 U.S. Department of Labor, Bureau of Labor Statistics Current Population Survey (available at <http://www.bls.gov/data>).

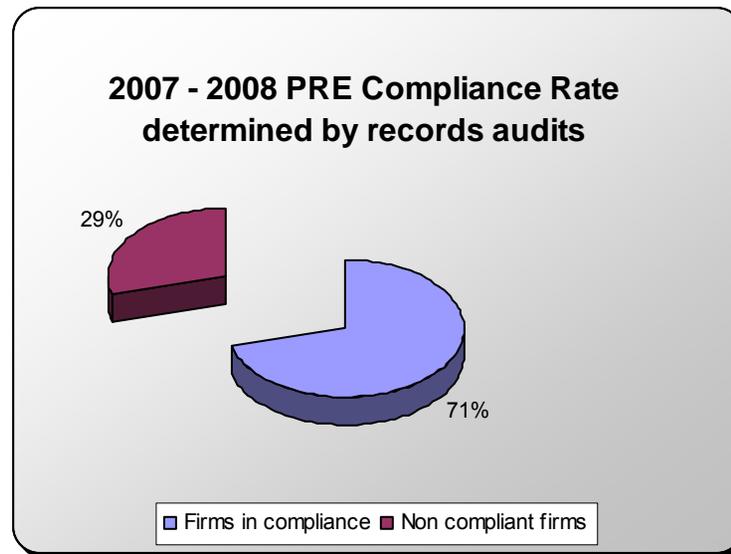
Lead Profession Licensure and Regulatory Compliance

The Licensure and Compliance section offers certification for five separate disciplines: Lead Inspector, Lead Hazard Risk Assessor, Lead Abatement Worker, Lead Abatement Supervisor, and Project Designer. The program also offers accreditation to training providers to offer both initial and refresher training courses for each of the disciplines. The Licensure and Compliance section further regulates lead activities in residential housing and child-occupied facilities in Kansas including lead abatement, lead inspections, lead hazard risk assessments, lead hazard screens, EBL investigations and post-abatement clearance.



PRE Renovation Education

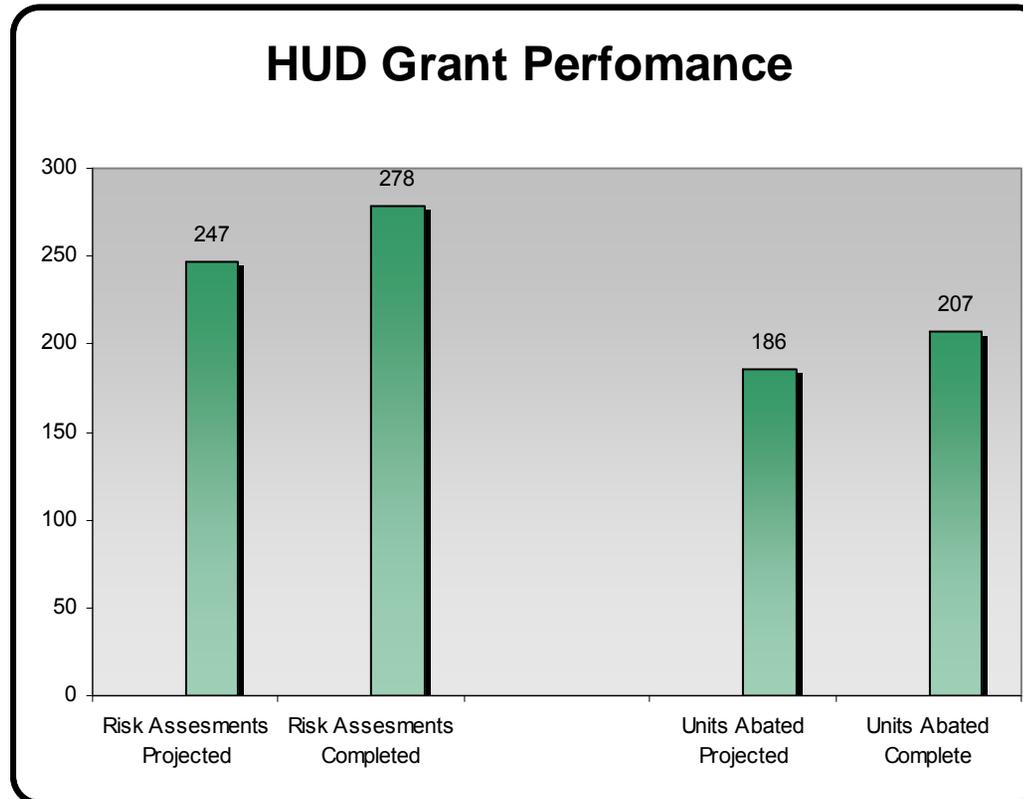
The Pre-Renovation Education (PRE) section functions to provide residents of pre-1978 housing with information to help prevent lead exposure. Contractors, property managers, and others who perform renovation and remodeling work for compensation in residential housing that may contain lead-based paint are required to distribute a lead pamphlet and a renovation notice to the housing owner and/or occupants before renovation begins. An enforcement inspection is conducted to ensure compliance is met. If compliance is not met a non-compliance notice is issued. A notice of intent to assess civil penalty may be issued after a non-compliance notice has been attempted. Notice of intents to assess civil penalty may require an agreement from the contractor to complete additional lead training in addition to a fine.



Percent of Enforcement Inspections which required non-compliance notices to be issued.

HUD Lead Hazard Control Program

KDHE's Project Lead Safe KCK, is a HUD Lead Hazard Control Program responsible for identifying and reducing lead hazards in homes built before 1978, to identify lead poisoned children, and to increase community outreach and education. The KDHE Healthy Homes and Lead Hazard Prevention program secured a second round of funding in 2006 for nearly \$3 million to continue outreach and education, to provide risk assessments, remediation and clearance examinations in identified housing units, economic opportunities for individuals and businesses, provide lead hazard control interventions in 265 qualified housing units, assisting approximately 300 children from low-income families. Project Lead Safe KCK continues to exceed program benchmarks.



Represents final numbers through 12/31/2008 for units completed compared to benchmarks established when program started.