Childhood Lead Poisoning in Cayuga County: Building Local Capacity and Coalitions

Final Report

Prepared by:
Katrina Smith Korfmacher, PhD and Valerie George
University of Rochester, Environmental Health Sciences Center
601 Elmwood Avenue, Box EHSC
Rochester, NY 14642

January 31, 2009.

This project was supported by New York State Health Foundation grant number SOG1-1935251

EXECUTIVE SUMMARY

Lead poisoning is one of the most significant environmental threats to children"s health in upstate New York. Even at low levels, lead poisoning can make it difficult for children to learn, contribute to behavioral problems, and cause medical problems later in life. While there are many possible sources of lead exposure, the most common problem for children is being exposed to dust, soil, or paint containing lead in older housing (pre-1978).

This report is the final step in a year-long project to support community participation in and development of local coalitions to prevent childhood lead poisoning in Cayuga, Chemung, and Oneida Counties. The project was sponsored by the New York State Health Foundation and coordinated by the University of Rochester with local partners in three counties. These partners were Catholic Charities of Chemung County (CCC), Mohawk Valley Community Action Agency (MVCAA), and the Cayuga County Cornell Cooperative Extension. The University of Rochester"s Environmental Health Sciences Center (EHSC) worked with the Rochester Coalition to Prevent Lead Poisoning (CPLP) to provide technical advice, materials, and experience based on their past lead coalition-building efforts in Monroe County. The CPLP has worked with community, government, and academic partners to promote lead poisoning prevention through a variety of educational, direct action, financial, and policy strategies.

This report provides a summary of data on childhood lead poisoning in Cayuga County, description of the coalition-building activities and direct actions conducted as part of this project, and recommendations for next steps.

This report is based on publicly available screening and elevated blood lead level (EBL) data from the New York State Department of Health. 2000 Census demographic and housing data was used to map areas of high lead poisoning risks. Cornell Cooperative Extension and Cayuga County Health Department staff provided an overview of existing efforts to prevent childhood lead poisoning. These local partners" coalition-building activities conducted under this project are summarized in this report. The report concludes with recommendations for next steps that were developed through discussions between the University of Rochester staff and local partners.

State Health Department data show that in 2005, 17 children in Cayuga County were newly identified with blood lead levels over 10 g/dL, the Center for Disease Control"s "level of concern." Cayuga had the 24th (out of 57 counties outside NYC) highest incidence *rate* for elevated blood lead levels. Although these children came from different parts of the county, the largest number of cases occurred in the city of Auburn. Cayuga County has a strong record of screening children for lead poisoning, although there are certain populations, particularly rural Mennonite children, who may not be adequately tested.

Through this project, Cornell Cooperative Extension partnered with the Cayuga County Health Department to provide education and outreach related to primary prevention of and blood screening for childhood lead poisoning prevention. Throughout the year Cornell Cooperative Extension brought local organizations together several times to learn about, coordinate and promote lead poisoning prevention efforts in the county. Activities included developing a display for educational events, hosting a free Lead Safe Work Practices course, and initiating public education through the local press. These efforts culminated in a door to door hazard identification and outreach effort on Orchard Street, a high risk neighborhood in the City of Auburn.

This report documents the current status of efforts to reduce childhood lead poisoning in Cayuga County. It is based on the information provided to project partners during 2008 and may not be comprehensive. It is intended to provide a foundation for future projects, planning, and education by local partners or interested others.

ACKNOWLEDGEMENTS

We would like thank the many individuals and organizations that provided data for and feedback on earlier drafts of this report. In particular, the authors would like to thank the following individuals and organizations for their assistance in preparing this report:

Renee Jensen, Cayuga County Cornell Cooperative Extension
Lisa Donalds, Cayuga County Department of Health

Although we received input from many individuals and organizations, statements made in this report are solely those of the authors.

COMMENTS

We welcome comments on this report, which may be sent by email to: Katrina_korfmacher@urmc.rochester.edu (University of Rochester) or to Renee Jensen at Cornell Cooperative Extension - Cayuga County (rej9@cornell.edu)

Or by mail to:

Katrina Smith Korfmacher, PhD/Valerie George
University of Rochester, Environmental Health Sciences Center
601 Elmwood Avenue, Box EHSC
Rochester, NY 14642

Renee Jensen
Cornell Cooperative Extension Cayuga County
248 Grant Avenue
Auburn, N.Y. 13021

In a case of unlimited resources, it would be ideal to have a complete lead paint inspection to inventory all the surfaces in each home that contain lead, and a risk assessment to guide treatment of these hazards. However, given the expense of lead paint inspections and risk assessments, this is often not feasible. Below, we summarize the most common approaches to finding, fixing, and maintaining controls on lead hazards.

Finding lead hazards

One of the challenges of controlling lead hazards is that it may be difficult and/or expensive to document lead hazards. It is impossible to tell from looking at paint, dust, or soil whether or not it contains lead, and whether or not there is an exposure hazard. The federal government has developed a variety of protocols, tools, and techniques for documenting lead risks in housing:

*Risk assessment***:** A risk assessment identifies lead based paint hazards (for example, deteriorated lead based paint, lead in dust, or contaminated bare soil) and provides a range of options for safely addressing these hazards using appropriate treatments. Risk assessments

Costs of lead hazard controls

One of the most commonly cited barriers to removing lead hazards is the cost of lead hazard control. It is important to be clear how these costs are estimated. For example, interim controls are generally less costly than full abatement; however, they may require ongoing maintenance that adds costs over time. In some situations, lead hazards arise from paint that is peeling as a result of recurrent roof leaks. In this case, a new roof might be considered by some to be a lead hazard control cost, and by others to be a non-lead related repair cost incurred because of deferred maintenance.

The Center for Governmental Research"s Needs Assessment for Monroe County (2002) cited a range of costs to address lead hazards between $7,557 and $70,000 per unit, depending on the assumptions made. The report projected additional costs of up to $7,000 per unit for relocation of residents. However, subsequent experience by the Monroe County Department of Public Health"s HUD grant program yielded an average cost to make a unit lead safe of $3,253 per unit for interim controls only ($5,598 for interim controls with window replacement). At the same time, the Get the Lead Out program contracted with a Risk Assessor who calculated repair costs in high-risk units in Rochester to average $3,366 to address all lead hazards using HUD"s standard treatments. More recently, a survey of landlords on the costs of complying with the lead safety standards of the Rochester local lead law found that a third of the respondents had no costs associated with compliance. Those who did spend money to comply reported an average cost of $2,618 per unit (CGR, 2008). It is important to remember that, while the Rochester law does require Lead Safe Work Practices, it does not mandate HUD"s standard treatments of lead hazards. Thus, the standards applied, methods used, and range of repairs attributed to lead hazard controls can drastically affect estimated costs.

MAGNITUDE OF PROBLEM

Childhood lead poisoning rates have decreased in the past several decades, but New York State"s rates remain among the highest in the country, particularly among low-income children living in older housing. According to the CDC, in 2001 New York had the second highest number of children with confirmed elevated blood lead levels in the country, and the highest number of high-risk (pre-1950) housing units (Meyer, etc al. 2003). In 2001, 9,917 New York State children were found to have blood lead levels over 10 µg/dL, the level at which recent research showed children have already lost around 7 IQ points (Canfield et al 2003). Research has found no „safe" level of lead in children. Nationally, the percentage of children under 6 years of age with confirmed elevated blood lead levels dropped from 7.5% in 1997 to 1.21% in 2006; over the same period of time, New York"s rates (excluding New York City) dropped from 6.31% to 1.56% (CDC, 2008). Although New York State has a universal screening law that requires screening at ages one and two, not all children in fact have their blood tested for lead. Based on NYSDOH data, Cayuga County has a historically high screening rate (the second highest rate in 2003 of children less than 6 years of age, among the 57 counties outside New York City). Anecdotal information suggests that screening rates are higher in the cities (Auburn) and among Medicaid recipients and that significant gaps remain, particularly among rural Mennonite families.

Prior to 2003, state reports summarized screening data by the number of children screened at least once by age 6; results therefore reflect testing of children born at least 6 years prior to the report. Table 2 shows the percent of children who are tested at least once before they turn 6; 2003 data includes children born before 1998.

children tested in that year) declined from slightly above the statewide average to just over half the statewide average between 2000 and 2003 (Table 4).

Table 4: Prevalence Rate of Confirmed Elevated Blood Lead Levels (Number of Tests >=10 µg/dL per 100 children screened) Among Children Under 6 Years of Age*

	2000

Table 5: Incidence (New Cases 10 µg/dL/100 Screened)*

2000	2001	2002

Summary

A host of laws, agencies, grant programs, and non-governmental organizations address lead poisoning at the local through national levels. Nonetheless, significant gaps remain. These include:

While New York State requires universal blood lead testing of children at ages 1 and 2 (and older if they are at risk), this requirement is difficult to enforce, resulting in variable testing rates. In Cayuga County, ranked 13th highest out of 57 upstate New York counties for testing rates, only 40% of children born in 2001 and 2002 had been tested twice by 36 months of age.

Federal disclosure laws require new owners and renters to be informed of any known lead hazards. However, since there is no requirement to test for lead hazards, few owners have knowledge of lead hazards to share.

There is no law requiring lead safety in housing, except that which is supported by federal housing aid programs.

State and local health departments provide most of the lead education in Cayuga County; however, these efforts are limited by available resources and staff time.

Federal grant programs affect only a small percentage of housing with risks of potential lead hazards; few other funding sources exist for helping to address these hazards.

LEAD POISONING RISKS IN CAYUGA COUNTY

As described above, lead poisoning is of particular concern for children. The group most at risk are children under age 6 (particularly those 2 and under) who live in older housing in poor condition. Older housing in poor condition typically presents the highest risk, and rental housing tends to be in poorer condition than owner occupied housing. Also, federally supported housing is subject to additional lead regulations. To clarify the location and nature of high lead risk housing, this section summarizes the age, value, and ownership of housing in the county along with demographics of the County.

Overview of population

According to 2000 Census data, the population of Cayuga County was 81,963, with around a third of the population residing in the City of Auburn. PasBT1 0 0 1 7r4(he)3( )-9.13 6od ew(d)13( )-0

Table 6A: Overview of population at risk

Total Population	# of children <6 and under living in poverty	Population for whom poverty

References

Canfield, R.L., C.R. Henderson, D.A Cory-Slechta, C. Cox, T.A. Juski, B.P Lanphear. 2003. Intellectual impairment in children with blood lead concentrations below 10 µg per Deciliter. *New England Journal of Medicine*. 348(16): 1517-1526.

Centers for Disease Control and Prevention. 2008. Data and Surveillance Resources. http://www.cdc.gov/nceh/lead/surv/data.htm. Accessed Feb. 12, 2008.

Center for Governmental Research. 2008. An Evaluation of the City of Rochester"s Lead Law: 2006-2008. www.cgr.org. Accessed January 31, 2009.

Center for Governmental Research. 2002. Lead poisoning among young children in Monroe County, NY: A needs assessment, projection model, and next steps. Rochester, NY: Prepared for the Monroe County Department of Health. Available at: http://www.monroecounty.gov/p/eh-LeadPoisoningAmongYoung.pdf. Accessed February 28, 2008.

Lanphear, B.P., R.S. Byrd, P. Auinger, and S.J. Schaffer. 1998. Community characteristics associated with elevated blood lead levels in children. *Pediatrics* 101(2): 264-271.

Landrigan, P.J., C.B. Schechter, J.M. Lipton, M.C. Fahs, and J. Schwartz. 2002. Environmental pollutants and disease in American children: Estimates of morbidity, mortality, and costs for lead poisoning, asthma, cancer, and developmental disabilities. *Environmental Health Perspectives*. 110(7): 721-728.

Meyer, P.A, et. al. 2003. Surveillance for Elevated Blood Lead Levels Among Chidren –

Lead Poisoning in Cayuga County
Fact Sheet

1. Although lead poisoning is heavily concentrated in the City of Auburn, it affects all areas of the County. Throughout Cayuga County, 17 children had elevated blood lead levels in 2005

Appendix A
County-wide Distribution of Risk Factors
Cayuga