



Another Link in the Chain

State Policies and Practices
for Case Management
and Environmental Investigation
for Lead-Poisoned Children

Update

National Center for Healthy Housing

Alliance To End Childhood Lead Poisoning

November 2001

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The National Center for Lead-Safe Housing was founded in 1992 to bring the housing, environmental and public health communities together to combat lead poisoning. In November 2001, we changed our name to National Center for Healthy Housing to reflect our expanded mission to also investigate strategies to reduce children's exposure to other environmental risks in the home.

The Center seeks to develop and promote practical methods to protect children from residential environmental hazards while preserving the supply of affordable housing. We remain committed to our efforts to reduce childhood lead poisoning as we expand our focus.

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The Alliance is a national, non-profit public interest organization dedicated to preventing childhood lead poisoning.

The Alliance's mission is to frame the national agenda, formulate innovative approaches, and bring critical resources to bear – scientific and technical knowledge, law and public policy, economic forces, national allies, and community organizations and leaders – to prevent childhood lead poisoning.

Additional Copies

Additional copies of “*Another Link in the Chain Update*” can be obtained from either the National Center or the Alliance.

ANOTHER LINK IN THE CHAIN UPDATE:
STATE POLICIES AND PRACTICES FOR CASE MANAGEMENT
AND
ENVIRONMENTAL INVESTIGATION FOR LEAD-POISONED CHILDREN

November 2001

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This report is based on analysis of responses to a survey that was conducted in 2000. We were excited and fortunate to have all state programs, including the District of Columbia, and nineteen local programs participate. We would like to give recognition and express our sincere thanks to all the staff of local and state CLPPPs who helped complete the survey through telephone conversation, e-mail, or fax. Without their help this report would not have been possible. We would also like to thank the many staff who willingly gave their time to clarify pieces of information so that the final report could be as accurate and clear as possible.

In conducting the survey and compiling the final report, we have done our best to be as objective and as fair as possible. We apologize in advance if we have gotten anything wrong, harmed any program unintentionally, or failed to capture the “true picture” of any program. As with *Another Link in the Chain*, the purpose of this report is not to embarrass or chastise any program but to focus on opportunities for change.

Special recognition and thanks also goes to:

- ◆ Nancy Tips of the Alliance To End Childhood Lead Poisoning for insightful editorial comments and principal review of this document.
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CHAPTER 1: EXECUTIVE SUMMARY

KEY FINDINGS AND RECOMMENDATIONS

This survey, an update to *Another Link in Chain* conducted in 2000 by staff of the National Center for Lead Safe Housing (the Center), was limited in scope to documenting any changes since 1998 in policies and practices for case management and environmental investigation for lead poisoned children. An additional feature was our investigation of the impact of *Another Link in the Chain* in precipitating change.

The Center contacted and received responses from program directors or knowledgeable staff from all fifty states and the District of Columbia, as well as from nineteen local programs. The survey consisted of seventeen questions that focused on policy, case management, and environmental investigation with three main areas of concern: 1) the ability of state and local Childhood Lead Poisoning Prevention Programs (CLPPPs) to develop and maintain the necessary infrastructure for dealing with childhood lead poisoning, 2) the availability of adequate resources for secondary prevention efforts, and 3) the ability of CLPPPs to ensure that all identified cases receive follow-up care. Key findings and recommendations for each of these areas are summarized below. Additional details for state and local programs participating in our survey can be found in the sections entitled “State Progress Reports” and “Local Progress Reports” of this report. This report does not address screening, hazard control, or primary prevention.

1. DEVELOPING AND MAINTAINING AN INFRASTRUCTURE

State Blood Lead Reporting Systems

Without a system of laboratory reporting, programs cannot easily identify children with elevated blood lead levels (BLLs). We found that while nearly all states (48) require laboratories to report elevated BLLs, only 24 states require reporting of *all* BLLs. Reporting of *all* BLLs enables programs to both evaluate the extent of childhood lead poisoning within their screened population and to identify high-risk areas and subpopulations.

Recommendation:

- ◆ States should require laboratories to report all BLLs to the state CLPPP or to the State Health Department if no CLPPP exists.

System to Identify New Cases

Having a system in place to identify new cases of childhood lead poisoning is also a basic requirement for organizing follow-up care. We found four state programs that were unable to identify the number of children in their state with BLLs greater than or equal to 20 µg/dL for 1998. In addition, three states and one local program were able to provide only estimated numbers. Without the ability to identify children with elevated BLLs, it is nearly impossible to ensure that such children receive all necessary follow-up services.

We observed an overall decline in the reported numbers of children with BLLs equal to or greater than 20 µg/dL from an estimated 33,423 in 1997 to an estimated 21,887 in 1998. One possible explanation for this decline could be a steep decline in the rate at which children are being screened. However, this does not appear to be the case. While it was beyond the scope of this study to look at screening rates during these two time periods, the data we did examine suggest that screening rates overall stayed about the same from 1997 to 1998. We found that staff of several programs were unable to clearly identify reasons for this decline. Also of note: six states reported an increase of 150 to 300 percent in the number of cases, indicating that even as BLLs in the general population continue to decline, improved screening practices can identify many additional children with elevated BLLs.

Recommendations:

- ◆ State and local programs without an effective system to identify new cases of childhood lead poisoning should give establishment of such a system high priority.
- ◆ States with low screening penetration rates within high-risk areas or populations, particularly the Medicaid population, should continue to emphasize the importance of routine screening.

Ability to Identify Children on Medicaid

Children receiving Medicaid are at high-risk for lead poisoning and as a population have not been adequately screened. Medicaid reimbursement is available for follow-up services provided to lead poisoned children on Medicaid. Both adequate screening of this population and the availability of reimbursement for follow-up services are of interest to the state and local CLPPPs and should motivate efforts to identify Medicaid beneficiaries. Although there has been improvement since 1998 in programs' ability to identify the number of children with elevated BLLs who were on Medicaid, as of 2000, only 14 states had developed linkages with their state counterparts or were in the process of doing so. Such linkages enable health departments and Medicaid agencies to track screening among Medicaid beneficiaries.

Recommendation:

- ◆ All CLPPPs should work with their state Medicaid agencies to ensure that high-risk children are screened and to secure adequate reimbursement for case management follow-up and environmental investigations.

Ability to Identify the Number of Children who Receive Case Management

The ability to identify the number of children who receive case management services is essential to providing oversight and management for the services needed by children with childhood lead poisoning. Eighteen state programs reported that they did not know how many children received case management services in 1998. In addition, four state and four local programs were able to provide only estimated counts.

Recommendations:

- ◆ All programs should have a system in place to identify and track those children who receive case management services.
- ◆ Case management services should be offered to all children with elevated BLLs.

2. AVAILABILITY OF ADEQUATE RESOURCES

Acquiring adequate funding for both case management and environmental investigation services has historically been a challenge for programs. Since 93 percent of children with BLLs greater than or equal to 20 $\mu\text{g}/\text{dL}$ are estimated to receive Medicaid (Kaufmann et al, 2000), Medicaid reimbursement for services should be the major source of funding for most secondary prevention programs. Only 19 states (one more than in 1998) reported policies and procedures were in place for receipt of Medicaid reimbursement for case management services. The effect of these state policies on national resources for case management is striking. We estimate, based on the number of cases reported in 1998, that reimbursement for case management was *not* available for nearly two-thirds of all U.S. children with $\text{BLL} \geq 20 \mu\text{g}/\text{dL}$ who were eligible for Medicaid. The rates of reimbursement for states receiving reimbursement have not increased since 1998 and range from \$25 for one “educational” visit to \$1240 for eight months of follow-up.

Resources are critical to CLPPPs ability to deliver services to children with elevated BLLs. A number of large cities in states with Medicaid reimbursement policies report that they do *not* bill Medicaid for their case management work. This local policy decision results in a significant loss of resources potentially available to cities where the lead poisoning problem is most severe. It also represents a decrease in the level of services that can be offered to families of lead poisoned children in their affected area. Several local jurisdictions also reported that Medicaid reimbursement was not available, even though their state reported otherwise.

It may be possible for local jurisdictions to obtain Medicaid reimbursement even if such policies are not in place at the state level. One local jurisdiction has successfully negotiated an agreement with their local Medicaid managed care plan to receive reimbursement for case management services provided to children who are Medicaid eligible.

On the other hand, 24 states, as compared to 21 states in 1998, reported that they do receive Medicaid reimbursement for environmental investigations. Because the majority of states with large numbers of reported cases receive Medicaid reimbursement for environmental investigation, we estimate that reimbursement is available for an estimated two-thirds of U.S. children with $\text{BLL} \geq 20 \mu\text{g}/\text{dL}$ who are eligible for Medicaid. Rates of reimbursement range from \$38 to more than \$600 per investigation. Four states have obtained increases in the rates of reimbursement for environmental investigations since 1998.

A key goal for CLPPPs should be to ensure that reimbursement rates for both environmental and case management services reflect the actual costs of service delivery. Given the wide range of reimbursement rates, it is possible that in many places the rates do not fully cover the costs associated with providing services.

Recommendations:

- ◆ State programs that currently do not receive Medicaid reimbursement for either case management or environmental investigation services should take steps immediately to obtain such reimbursement.
- ◆ Local programs in states with reimbursement available, which do not currently bill for services to Medicaid clients, should take steps immediately to secure reimbursement.
- ◆ Programs should track the costs associated with providing services in order to ensure that rates of reimbursement for case management and environmental investigations are based on actual costs for delivering these services and to bolster advocacy efforts for raising rates where necessary.
- ◆ State Medicaid programs should re-evaluate reimbursement rates based on cost and effectiveness of measures.

3. ABILITY TO ASSURE FOLLOW-UP CARE

Programs can expect to be held accountable for the success of their follow-up efforts. Program managers must ensure that their programs have sufficient resources to provide the follow-up services needed for lead poisoned children and their families. Programs should not expect that a one-time “outreach” visit to the home will be successful in helping most families manage this complex environmental problem.

Blood Lead Level Triggers

The CDC recommends that case management and environmental investigations be provided for all children with repeated BLLs between 15 and 19 $\mu\text{g}/\text{dL}$ and for children with BLLs $\geq 20 \mu\text{g}/\text{dL}$ (CDC, 1997). According to our survey, 20 state and two local programs are not able to provide case management services at this minimal level and 25 state and 7 local programs are unable to meet current CDC guidelines for environmental investigations.

Recommendations:

- ◆ At a minimum, state and local programs should provide case management services and environmental investigations at the BLLs recommended by the CDC.
- ◆ When resources allow, case management services and environmental investigations should be offered to children with BLLs of 10 $\mu\text{g}/\text{dL}$ and above.

Dust Testing

Because lead contaminated dust is often invisible to the naked eye and can be a major pathway of lead exposure for young children, dust testing is critical for assessing lead hazards within the home. Thirty-seven state programs reported that they routinely perform dust testing as part of their environmental investigations for assessment purposes. This finding represents an encouraging change in the practice of case follow-up, as 10 of these states reported that they did not perform routine dust testing in 1998. However, the lack of dust testing by 14 states that manage nearly one third of U.S. children with BLLs ≥ 20 $\mu\text{g}/\text{dL}$ is a conspicuous failure.

Recommendation:

- ◆ All programs should incorporate lead dust testing into their protocol as a routine part of environmental investigation.

Case Close-Out Criteria

Case close-out criteria that are clearly and adequately defined can help delineate the responsibilities of programs and can be used to evaluate program success. Forty-four state programs and 19 local programs reported that they had specific case close-out criteria. While it is encouraging that more programs have case close-out criteria than in 1998, these criteria still vary greatly between programs. Thirteen state programs continue to close a case based on a child's BLL alone, an inadequate criterion for control of an environmental disease. Criteria must also include control of hazards in the child's environment and provisions for administrative closure. Only eight state programs met our minimum basic close-out criteria: reduction in a child's BLL; control of environmental lead hazards in the child's environment; and provisions for administrative closure, where needed. This finding suggests that more work remains to be done in this area.

Recommendation:

- ◆ All programs should adopt case close-out criteria that include a minimum of three elements: reduction in a child's BLL; control of environmental lead hazards in the child's environment; and provisions for administrative closure.

4. CHANGING PRACTICE

There is evidence that practices/protocols are changing for both state and local programs. Sixteen state and eight local programs reported that since *Another Link in the Chain* was published they have recommended changes in policy such as increasing screening, changing case management practices, developing written protocols for environmental investigations, increasing dust testing, and increasing program evaluation. Five state and two local programs

have already been successful in implementing these recommendations. Four programs were able to secure increases in the rate of Medicaid reimbursement for environmental investigations and 10 more states are now conducting dust testing as a routine part of environmental investigations. While these changes are encouraging, all programs need to realize that they have the ability to change their practices and protocols based on evidence of their effectiveness.

Recommendation:

- ◆ All CLPPPs should evaluate how well their programs are able to provide follow-up services to children with elevated BLLs and how effective their follow-up efforts are at decreasing children's exposures and BLLs. Programs should use this information to advocate for needed resources and policy changes to improve outcomes for children with elevated BLLs in their jurisdiction.

CHAPTER 2: UPDATE REPORT

1. ABOUT THE SURVEY

In the fall of 1998, the National Center for Healthy Housing (the Center) and the Alliance To End Childhood Lead Poisoning conducted a survey to characterize the nature and extent of case management and environmental investigation services for lead poisoned children provided by state and local health departments. The results were published in *Another Link in the Chain: State Policies and Practices for Case Management and Environmental Investigation for Lead-Poisoned Children*, which included recommendations for improvement in several areas. In 2000, the Center developed a follow-up survey instrument to document changes in policies and practices since 1998 and to evaluate the impact of this document in precipitating change at the state and local level.

2. METHODS

The survey consisted of 17 questions that focused on policy, case management, and environmental investigations. Between January and August 2000, Center staff administered the questionnaire by phone and via fax/e-mail to 70 childhood lead poisoning prevention programs (CLPPPs). Fifty-one state (District of Columbia is included as a state) and 19 local CLPPPs participated in the survey, and of these, all but four local CLPPPs had participated in the earlier survey. The four CLPPPs new to the survey were Jefferson County, Kentucky; Butte, Montana; Miami-Dade County, Florida; and Memphis County, Tennessee. Selection of local programs was based on two factors: either that the program received a childhood lead poisoning prevention grant from the Centers for Disease Control and Prevention (CDC) or was known to be in a local area with a serious lead problem.

After the surveys were completed, the data were entered into an Access database for analysis. All entered data were double-checked by a second staff member at the Center and follow-up phone calls were made to clarify any confusing or discrepant information. Data from each program were also compared to data obtained in 1998 during the original survey.

This report focuses on three main areas of concern: 1) the ability of state and local CLPPPs to develop and maintain the necessary infrastructure for dealing with childhood lead poisoning, 2) the availability of adequate resources for secondary prevention efforts, and 3) the ability of state and local CLPPPs to assure that all identified cases receive follow-up care.

3. DEVELOPING/MAINTAINING INFRASTRUCTURE

Laboratory Reporting of Blood Lead Levels

A system of laboratory reporting is needed to ensure that all children with elevated blood lead levels (BLLs) are identified to the CLPPP so that timely follow-up care can be provided. In 1998, 47 states (92%) indicated that they had a laboratory reporting system in place, although 10 states indicated this system was not fully operational.

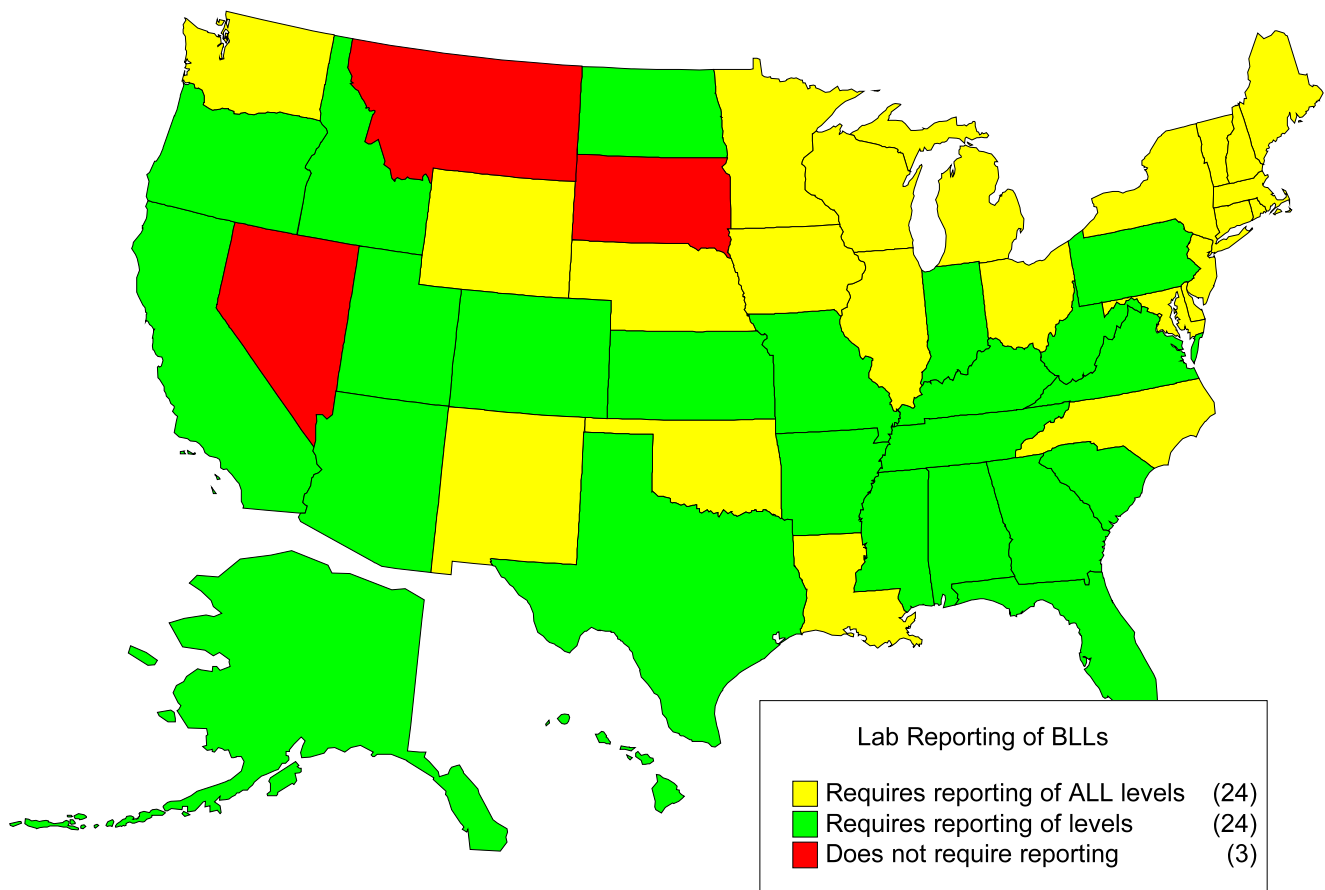
In 2000, we asked CLPPPs whether they *required* laboratories to report BLL results of

children. Forty-eight states (94%) reported that they required laboratories to report elevated BLL's; only Montana, Nevada, and South Dakota do not have such a requirement. However, only 24 states (47%) require reporting of *all* BLLs (See Figure 1). Required reporting of *all* BLLs is essential because it enables programs to evaluate the extent to which blood lead testing is taking place, as well as the extent of the childhood lead poisoning problem within their population. It also improves the program's ability to identify high-risk areas and subpopulations.

→ **Recommendation:**

- ◆ States should require laboratories to report *all* BLLs to the state CLPPP or to the State Health Department if no CLPPP exists.

Figure 1
LAB REPORTING OF BLOOD LEAD LEVELS, STATES, 2000



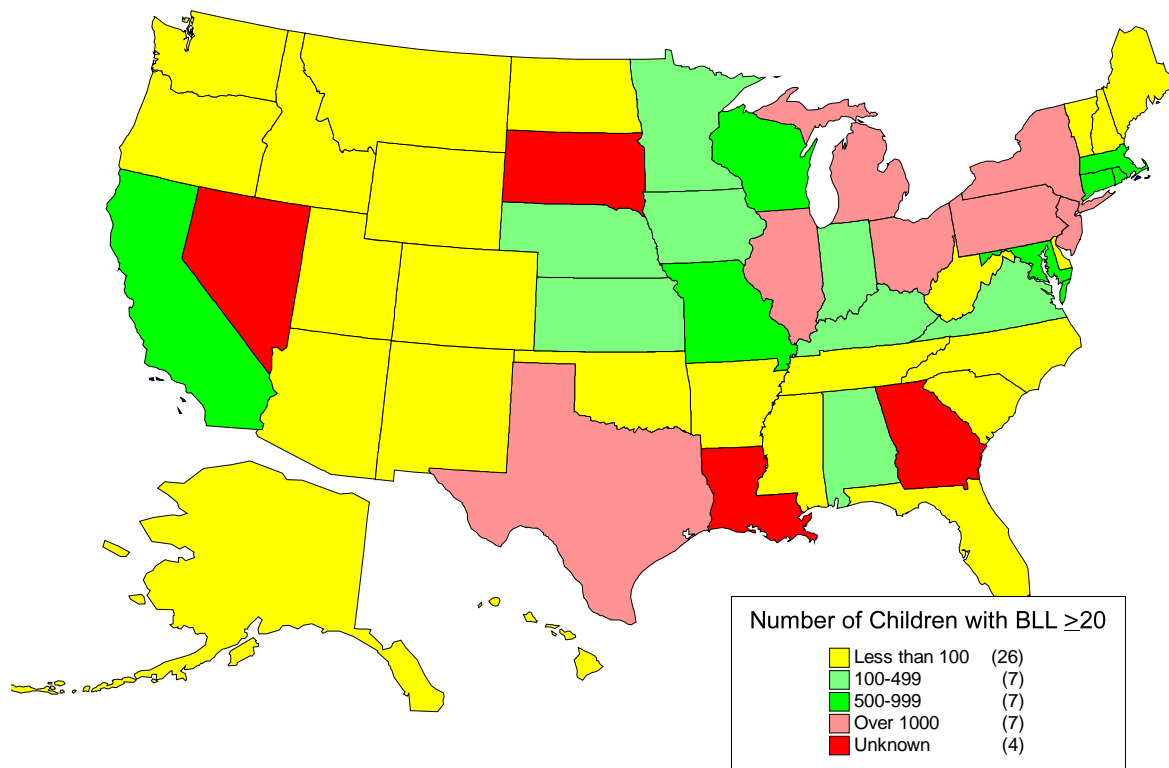
System to Identify New Cases

State programs must have a system to identify *new* cases so that follow-up activities can be organized. Programs were asked to report the number of *new* cases of lead poisoned children with BLLs greater than or equal to 20 µg/dL that they identified in 1998. The number of children newly identified in 1998 ranged from zero to 5,365 children (See Table 1). Twenty-five (49%) states identified less than 100 new cases. Seven states (Illinois, New Jersey, Pennsylvania, Ohio, New York, Michigan, and Texas) identified over 1,000 new cases in 1998. Three states (Connecticut, Kentucky, and Pennsylvania) provided only estimated numbers. Four states (Georgia, Louisiana, Nevada, and South Dakota) were unable to determine the number of new cases identified in 1998. These figures represent an improvement since our first survey in which eight states were unable to identify the number of children with elevated BLLs (See Figure 2).

Table 1 The Number of Children Identified in 1998 with BLL \geq 20 µg/dL by State

STATE	# of Children identified in 1998 with BLL\geq20 µg/dL	STATE	# of Children identified in 1998 with BLL\geq20 µg/dL
Alabama	313	Montana	1
Alaska	0	Nebraska	110
Arizona	36	Nevada	Unknown
Arkansas	44	New Hampshire	68
California	797	New Jersey	2,071
Colorado	76	New Mexico	22
Connecticut	Approx 500	New York	1,655
Delaware	34	North Carolina	79
District of Columbia	36	North Dakota	3
Florida	86	Ohio	1,657
Georgia	Unknown	Oklahoma	14
Hawaii	7	Oregon	16
Idaho	4	Pennsylvania	Approx 1,880
Illinois	5,365	Rhode Island	185
Indiana	354	South Carolina	30
Iowa	247	South Dakota	Unknown
Kansas	129	Tennessee	91
Kentucky	Approx 200	Texas	1,069
Louisiana	Unknown	Utah	3
Maine	80	Vermont	29
Maryland	772	Virginia	163
Massachusetts	775	Washington	11
Michigan	1,215	West Virginia	16
Minnesota	283	Wisconsin	613
Mississippi	71	Wyoming	5
Missouri	507	Total	21,887

Figure 2
NUMBER OF CHILDREN WITH BLLS ≥ 20 $\mu\text{g}/\text{dL}$ BY STATE, 1998



For local programs, the numbers of new cases of children with BLLs greater than or equal to $20 \mu\text{g}/\text{dL}$ for 1998 ranged from two in Salt Lake City, Utah to 3,359 in Chicago, Illinois. Only Harris County, Texas was unable to provide the specific number of new cases. The fact that some programs were only able to provide estimated numbers is of great concern, given that the ability to identify children with elevated BLLs is essential to ensure children receive all necessary services.

Although changes in reported numbers of new cases may not provide an accurate picture of the incidence of lead poisoning, these changes do suggest that certain trends are taking place across the nation. Overall, the reported number of children newly identified in 1998 with BLL's equal to or greater than $20 \mu\text{g}/\text{dL}$ appears to have declined since 1997. In 1997 states identified an estimated 33,423 children with elevated BLLs as compared to an estimated 21,887 children in 1998. Although nationally BLLs are declining (CDC, 2000), programs that reported a large decline were unable to clearly identify the reasons for the decline from 1997 to 1998. A marked decline in the screening rates, particularly in states with numerically large declines might be one explanation of this change. However, while it was beyond the scope of this study to look at screening rates during these two time periods, the available data suggest that screening rates overall stayed about the same from 1997 to 1998. Additionally, not all states reported a decline in the number of children identified. In six states (Alabama, Colorado, Maryland, Michigan, New Mexico, and Ohio) the number of lead poisoned children identified in 1998 was approximately 150 to 300 percent of the number identified in

1997. It is likely that these findings indicate a significant change in screening or reporting practices in these states, rather than an actual increase in the number of children being exposed to lead, suggesting that improved screening practices can lead to identification of many additional children with elevated BLLs.

The lead poisoning problem is not uniform across states. Lead poisoning remains a serious problem in states with a large number of housing units built before 1950. “America’s Top Ten”, the 10 states with the largest numbers of identified cases of childhood lead poisoning cases in both 1997 and 1998, include states outside of the Northeast and Midwest, which have long been identified as being home to the majority of lead poisoned children in the U.S. (See Table 2).

Table 2 - States Ranked According to Number of Newly Identified Cases of Lead Poisoning: “America’s Top Ten” for 1997 and 1998

“America’s Top Ten” 1997			“America’s Top Ten” 1998		
<i>State</i>	<i># cases ≥20 µg/dL</i>	<i># homes built prior to 1950*</i>	<i>State</i>	<i># cases ≥20 µg/dL</i>	<i># homes built prior to 1950*</i>
Illinois	8,140	1,647,495	Illinois	5,365	1,647,495
Pennsylvania	6,242	2,279,059	New Jersey	2,071	1,043,300
New York	5,588	3,551,180	Pennsylvania	1,880 est.	2,279,059
New Jersey	2,038	1,043,300	Ohio	1,657	1,553,491
Wisconsin	1,526	725,489	New York	1,655	3,551,180
Texas	1,107	899,703	Michigan	1,215	1,228,369
Ohio	1,056	1,553,491	Texas	1,069	899,703
California	1,000+ est.	2,228,107	California	797	2,228,107
Massachusetts	823	1,132,951	Massachusetts	775	1,132,951
Connecticut	800	451,001	Maryland	772	464,825

* 2000 Census Data

Although the number of newly identified cases does not give the complete picture of the extent of childhood lead poisoning within the population, it represents an aspect of the workload for programs, and has major implications for staffing and resources.

➔ **Recommendations:**

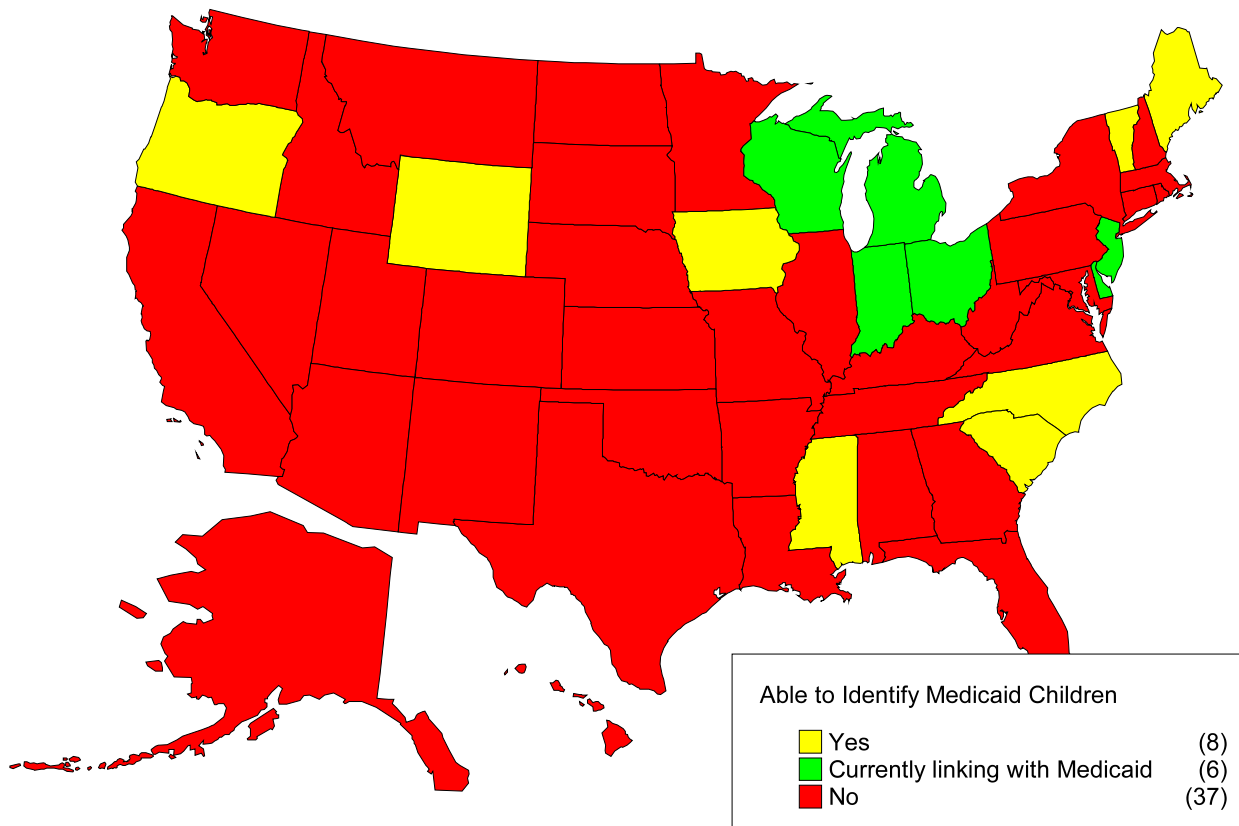
- ◆ State and local programs without an effective system to identify new cases of childhood lead poisoning should give establishment of such a system high priority.
- ◆ States with low screening penetration rates within high-risk areas or populations, particularly the Medicaid population, should continue to emphasize the importance of routine screening.

Ability to Identify Children Enrolled in the Medicaid Program

Young Medicaid beneficiaries are at high risk for lead poisoning and make up an estimated 93% of the children with BLLs greater than or equal to 20 µg/dL (Kaufmann et al., 2000). The Centers for Medicare and Medicaid services (CMS, formerly the U.S. Health Care Financing Administration – HCFA) require that all Medicaid enrollees be tested for lead poisoning at ages 12 and 24 months. State Medicaid agencies are required to report annually on the number of Medicaid enrollees screened. Identification of Medicaid enrollees is also a practical issue for CLPPPs, which are eligible to receive Medicaid reimbursement for follow-up services provided to children with elevated BLLs enrolled in Medicaid.

Eight states (Iowa, Maine, Mississippi, North Carolina, Oregon, South Carolina, Vermont, Wyoming) and four local programs (Harris County, Texas; Marion County, Indiana; San Diego, California; and Westchester County, New York) had the capacity to identify the number of children with elevated BLLs enrolled in the Medicaid program during 1998. At the time of our survey, four other states (Delaware, Indiana, Michigan, Ohio) reported that they were subsequently able to identify the number of Medicaid enrollees with elevated BLLs and two states (New Jersey, Wisconsin) reported that they were currently in the process of trying to link BLL data with Medicaid enrollment data, in order to make such identification possible (See Figure 3).

Figure 3
ABLE TO IDENTIFY CHILDREN ON MEDICAID, STATES, 1998



→ **Recommendation:**

- ◆ All CLPPPs should work with their state Medicaid agencies to ensure that high-risk children are screened and to secure adequate reimbursement for case management follow-up and environmental investigations.

Ability to Identify Number of Children Receiving Case Management

Twenty-nine state programs (59%) were able to report the specific number of children to whom they provided case management services in 1998. Eighteen states (35%) reported they were unsure of the specific number who received case management services and four (8%) states provided only estimates. Four of the 19 (21%) local programs were also unable to provide a specific number. Although the CDC does not require programs to track this information, being able to identify which children receive case management services is essential to ensure that services are provided to children in need.

→ **Recommendations:**

- ◆ All programs should have a system in place to identify and track those children who receive case management services.
- ◆ Case management services should be offered to all children with elevated BLLs.

Laws, Regulations, Pending Legislation

CLPPPs were asked if they were aware of any pending state legislation that might affect the conduct of case management or environmental investigations.

Four state programs and one local program reported that proposed legislation could affect environmental investigations. Pending legislation included changes that would provide tax incentives for environmental remediation, change the BLL that triggers investigations, allow clearance technicians, increase reimbursement, and increase enforcement.

Five state and three local programs reported that proposed legislation could affect case management services. Such legislation would increase screening rates, change the reporting of all BLLs, and possibly decrease funding (due to an overall cut in Medicaid funding).

4. AVAILABILITY OF ADEQUATE RESOURCES

Finding resources to pay for both case management and environmental investigations services is key to management of this environmental disease and was identified by many programs as a major issue in our original survey in 1998 (*Another Link in the Chain*). Since the vast majority of children with elevated BLLs are Medicaid eligible (Kaufmann et al, 2000), Medicaid reimbursement is critical.

Reimbursement for Case Management

In 2000, 19 states (37%) reported systems in place to receive Medicaid reimbursement for case management (See Figure 4), one more than in 1998. The effect of these state policies on national resources for case management is striking. We estimate, based on the number of cases reported in 1998, that Medicaid reimbursement for case management was *not* available for nearly two-thirds of U.S. children with BLLs greater than or equal to 20 µg/dL who are eligible to receive Medicaid. Reimbursement rates ranged from \$25 for one “educational” visit to \$1240 for eight months of follow-up (See Table 3).

Resources are critical to CLPPPs ability to deliver services to children with elevated BLLs. A number of large cities, including Baltimore, Maryland; Boston, Massachusetts; and New York City, New York, located in states with Medicaid reimbursement for case management available, report that they do *not* bill Medicaid for their case management work. This local policy decision results in a significant loss of resources potentially available to cities where the lead poisoning problem is most severe. It also represents a decrease in the level of services that can be offered to families of lead poisoned children in affected areas. Several smaller local jurisdictions also reported that Medicaid reimbursement was not available, even though their state reported otherwise.

Conversely, it may be possible for local jurisdictions to obtain Medicaid reimbursement even if such policies are not in place at the state level. At least one such local jurisdiction (Jefferson County, Kentucky) has successfully negotiated an agreement with their local Medicaid managed care plan to receive reimbursement for case management services provided to children who are Medicaid eligible.

Reimbursement for Environmental Investigations

In 2000, less than half (24 out of 50) of all states reported that they receive Medicaid reimbursement for environmental investigations (See Figure 5). However, based on the number of cases reported in 1998, we estimate that Medicaid reimbursement for environmental investigation is available for approximately 67% of all U.S. children with BLLs \geq 20 µg/dL who are eligible to receive Medicaid. Since 1998, three states (Kentucky, Maine, and Wyoming) that previously did not receive reimbursement have developed the capacity to bill Medicaid for environmental investigations.

The rates of reimbursement vary greatly among programs and range from \$38 to more than \$600 per investigation (See Table 3). While the amount of reimbursement for most programs has remained unchanged since 1998, four state programs (Alabama, Ohio, Missouri, and North Carolina) have been able to secure increases in their reimbursement rates for environmental investigations ranging from 13% to 24%. Four other states reported that they are also attempting to increase their rates of reimbursement for environmental investigations and/or case management activities.

Figure 4
MEDICAID REIMBURSEMENT FOR CASE MANAGEMENT, STATES, 2000

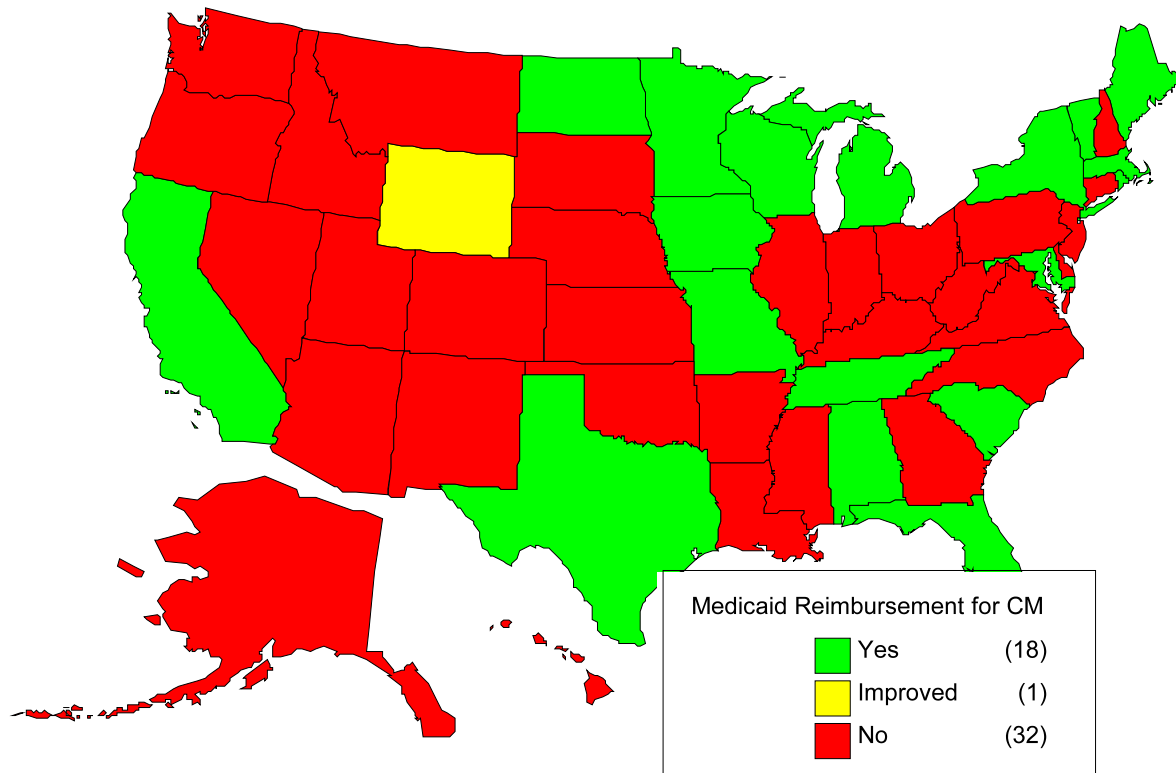


Figure 5
MEDICAID REIMBURSEMENT FOR ENVIRONMENTAL INVESTIGATIONS, STATES, 2000

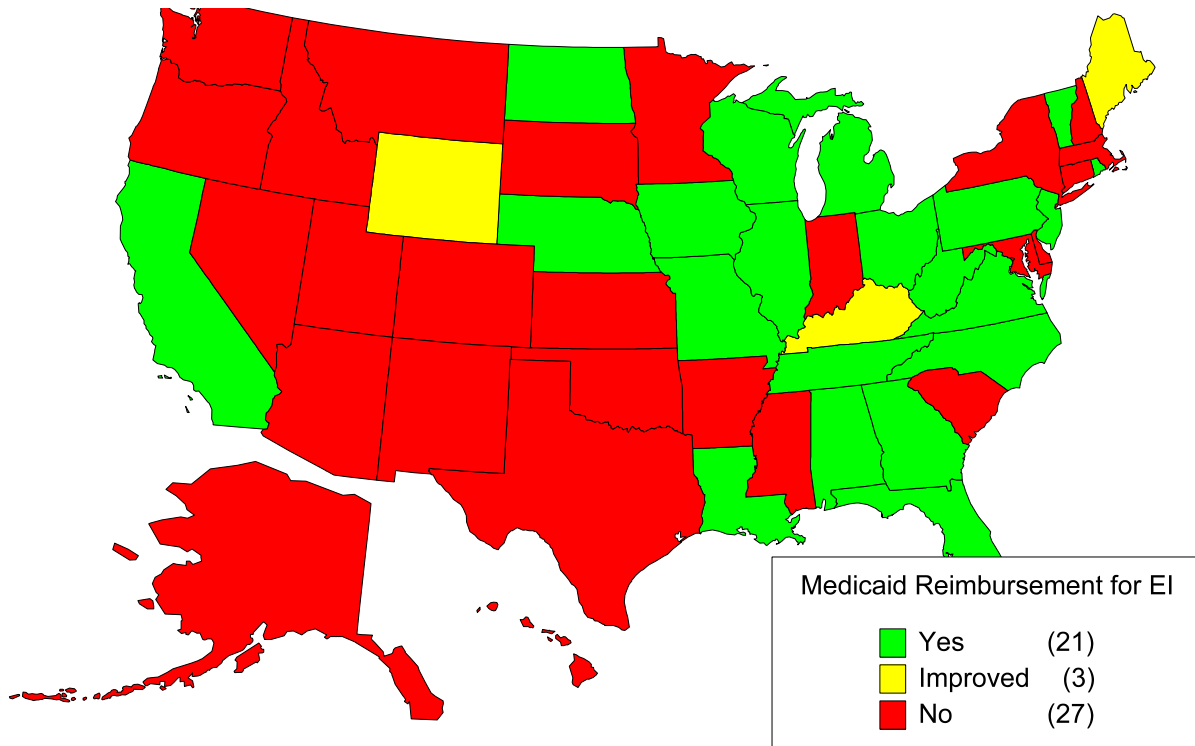


Table 3 – 2000 Reimbursement Rates for Case Management and Environmental Investigation

State Program	Rate of Reimbursement for CM	Rate of Reimbursement for EI
Alabama	\$36 an hour	\$280 per case
Alaska		
Arizona		
Arkansas		
California	Unsure of amount	\$270 per initial investigation, \$270 when the home or primary residence changes and the BLL increases
Colorado		
Connecticut		
Deleware		
District of Columbia		
Florida	Unsure of amount, reimbursed through cost reports	Unsure of amount, reimbursed through cost reports
Georgia		\$229 per initial investigation, \$197.34 per one follow-up investigation
Hawaii		
Idaho		
Illinois		\$43.75 per initial investigation
Indiana		
Iowa	Cost is based on average cost and varies from agency to agency	Cost is based on average cost and varies from agency to agency
Kansas		
Kentucky		\$297 per initial investigation, \$197 per follow-up investigation
Louisiana		\$38 per initial investigation, \$38 per follow-up visit
Maine	Unsure of amount, it is reimbursed through “coordinated activities” not specific for lead	\$500 per case
Maryland	Unsure of amount, but it is based on initial visit	
Massachusetts	Unsure of amount	
Michigan	\$70 for visit (allowed 2 nursing visits)	\$100 per initial investigation, \$70 for follow-up investigation
Minnesota	Negotiated at a local level not a state level	
Mississippi		
Missouri	\$50 per initial visit, \$40 per follow-up visit	\$161 per initial investigation, \$81 per follow-up investigation, \$40 for subsequent visits

Table 3 (continued) – 2000 Reimbursement Rates for Case Management and Environmental Investigation

State Program	Rate of Reimbursement for CM	Rate of Reimbursement for EI
Montana		
Nebraska		\$100 per initial investigation
Nevada		
New Hampshire		
New Jersey		\$130 per initial investigation, \$50 per follow-up investigation
New Mexico		
New York	Each case goes through a rate setting process, so it varies	
North Carolina		\$438 per case
North Dakota	Reimburses for nurses time only, so amount varies depending on salaries	Reimburses for nurses time only, so amount varies depending on salaries
Ohio		\$626 per case
Oklahoma		
Oregon		
Pennsylvania		\$350 per initial investigation
Rhode Island	\$200 per initial visit, then \$185 for the first 4 months of intensive CM (more months if needed), then \$75/month for 4 months	\$775 per case
South Carolina	Unsure of amount (family services bills Medicaid)	
South Dakota		
Tennessee	Unsure of amount	Unsure of amount
Texas	Unsure of amount	
Utah		
Vermont	Is reimbursed through cost reports	\$450 per case
Virginia		\$150 per case
Washington		
West Virginia		\$25 per initial investigation
Wisconsin	\$25 for one nursing educational visit, \$27.78 per hour for targeted CM services	\$102 for an initial investigation, \$51 for one follow-up visit
Wyoming	\$70 for one-time health education visit	\$100 for one-time environmental investigation

Local Program	Rate of Reimbursement for CM	Rate of Reimbursement for EI
Baltimore, MD		
Boston, MA		
Butte, MT		
Chicago, IL		\$43.50 per initial investigation
Detroit, MI	\$69.31 per initial visit	\$100 per initial investigation, \$75 per follow-up investigation
Duval County, FL	Never really sees the money	

Table 3 (continued) – 2000 Reimbursement Rates for Case Management and Environmental Investigation

Local Program	Rate of Reimbursement for CM	Rate of Reimbursement for EI
Harris County, TX	\$54 per initial visit, \$16 per follow-up (up to 6)	
Jefferson County, KY	\$269 per initial visit	\$220 per initial investigation
Los Angeles County, CA	Unsure of amount	Unsure of amount
Marion County, IN		
Memphis-Shelby County, TN	Never receives the money	\$128.88 per initial investigation
Miami-Dade County, FL		
Milwaukee, WI	\$25 for one nursing educational visit; \$21.33 per hour for targeted CM services	\$100 per initial investigation, \$50 when abatement is complete
New York City, NY		
Philadelphia, PA		\$350 per initial investigation, \$350 per case
Pinellas County, FL		
Salt Lake City, UT		
San Diego, CA	\$275 per visit, allowed 1 visit per case unless child moves to new residence	\$270 per initial investigation
Westchester County, NY	\$750 per case for 29 months of work	

A key issue regarding rates of reimbursement for both services is that the rates should reflect the actual costs of service delivery. Given the wide range of reimbursement rates, it is likely that in many places the rates do *not* fully cover the costs associated with providing services. In our original survey, only 10 states reported that they had determined the costs of providing case management services. CLPPPs need to document their actual costs and the effectiveness of providing follow-up services to a lead poisoned child so that they can successfully negotiate adequate Medicaid reimbursement rates for case management and environmental investigations.

A second reimbursement issue appears to be receipt of Medicaid funds for reimbursable services provided. Several programs in states where reimbursement is available reported that state and local providers of these services had not received reimbursement because they were not approved Medicaid providers or because the agency had decided not to bill Medicaid for reimbursement. Our survey data indicate that providers in only 10 of the 19 states currently set up to receive Medicaid reimbursement for case management actually had received Medicaid reimbursement for services rendered at the time of our survey.

→ Recommendations:

- ◆ State programs that currently do not receive Medicaid reimbursement for either case management or environmental investigation services should take steps immediately to obtain such reimbursement.
- ◆ Local programs in states with reimbursement available, which do not currently bill for services to Medicaid clients, should take steps immediately to secure reimbursement.

- ◆ Programs should track the costs associated with providing services in order to ensure that rates of reimbursement for case management and environmental investigations are based on actual costs for delivering these services and to bolster advocacy efforts for raising rates where necessary.
- ◆ State Medicaid programs should re-evaluate reimbursement rates based on cost and effectiveness of measures.

5. ABILITY TO ASSURE FOLLOW-UP CARE

Programs assure that all lead poisoned children receive necessary follow-up care by setting and implementing standards and by monitoring services based on these standards. These standards should include identification of a BLL at which case management and environmental investigations are provided (BLL trigger), incorporation of dust testing as part of routine assessments, and establishment of specific case close-out criteria.

Blood Lead Level Triggers

CDC recommends that case management be provided for children who have BLLs equal to or greater than 20 µg/dL and who have repeated BLLs between 15 µg/dL and 19 µg/dL (CDC, 1991). In 2000, only 31 state programs (60%) reported that they provide case management services at or below the CDC recommended level, a deterioration (7%) in the level of services reported to be available in 1998. Fourteen states (27%) reported that they begin case management activities at BLLs of 10 µg/dL, a slight improvement (5%) from our 1998 survey. Seven local programs (37%) also reported that they begin case management at BLLs of 10 µg/dL (See Tables 4 and 5).

Table 4 - Blood Lead Level Triggers Used by States for Case Management in 2000

Blood Lead Level µg/dL	# of States	% of States	Cumulative %	Comments
10	14	27	27	AK, AR, CO, FL, HI, IA, MI, NY, ND, OR, TN, UT, VA, WA
15	14	27	54	AL, CA, DC, DE, GA, ID, LA, MA, MO, NE, NH, SC, VT, WV
Repeated levels of 15-19, or start at 20.	3	6	60	MD, PA, OH
20	17	33	94	AR, CT, IL, IN, KS, KY, ME, MS, MT, NC, NJ, NM, OK, RI, SD, WI, WY
Case Management triggers not established	3	6	100	MN, NV, TX
Total	51	100		

Table 5 - Blood Lead Level Triggers Used by Local Programs for Case Management in 2000

Blood Lead Level µg/dL	# of Locals	% of Locals	Cumulative %	Comments
10	7	37	37	Butte, MT; Duval County, FL; Harris County, TX; Memphis-Shelby County, TN; Miami-Dade County, FL; Pinellas County, FL; Salt Lake City, UT
15	7	37	74	Baltimore, MD; Boston, MA; Chicago, IL; Jefferson County, KY; Marion County, IN; Milwaukee, WI; San Diego, CA
Repeated levels of 15-19 or start at 20	3	16	90	Los Angeles County, CA; New York City, NY; Philadelphia, PA
20	2	10	100	Detroit, MI; Westchester County, NY
Total	19	100		

Table 6 – Blood Lead Level Triggers Used by States for Environmental Investigations in 2000

Blood Lead Level µg/dL	# of states	% of states	Cumulative %	Comments
10	2	4%	4%	AK, NC
15	6	12%	16%	AL, CA, DC, OH, WA, WY
Repeated levels of 15-19 or start at 20	18	35%	51%	AZ, CO, CT, GA, IA, KY, MD, MO, MS, NE, NM, PA, TN, UT, VA, VT, WI, WV
20	21	41%	92%	AR (or at 15 if private MD requests) NJ (will sometimes do EI for 15-19) FL (will begin at 15 when resources allow – otherwise begins at 20). MI (state pays for 10, but due to resources it is usually done at 20) NY (will do for levels of 10-19 if resources allow – otherwise begins at 20) DE, HI, ID, IN, KS, LA, ME, MN, MT, ND, NH, OK, OR, RI, SC, SD
25	2	4%	96%	MA (mandatory at 25, optional from 20-24) IL (will do at lower levels if MD requests)
Environmental Investigation triggers not established	2	4%	100%	NV, TX
Total	51	100%		

Table 7 - Blood Lead Level Triggers Used by Local Programs for Environmental Investigations in 2000

Blood Lead Level $\mu\text{g}/\text{dL}$	# of locals	% of locals	Cumulative %	Comments
10	3	16%	16%	Harris County, TX Memphis Shelby County, TN – Will do EI's for BLL of 10 if there are multiple children at same address, or for repeated levels of 15-19. Otherwise, EI is performed at 20. Pinellas County, FL – Will begin EI at 10 if the child is less than 12 months old. Otherwise EI is started at repeated levels of 15-19.
15	5	26%	42%	Baltimore, MD; Boston, MA; Duval County, FL; Marion County, IN; San Diego, CA
Repeated levels of 15 or start at 20	4	21%	63%	Chicago, IL; New York City, NY; Philadelphia, PA; Los Angeles County, CA
20	7	37%	100%	Butte, MT; Detroit, MI; Jefferson County, KY; Miami-Dade County, FL; Milwaukee, WI; Salt Lake City, UT; Westchester County, NY

Current CDC guidelines recommend environmental investigations for children with repeated BLLs of 15-19 $\mu\text{g}/\text{dL}$. However, the trigger BLL used by programs for environmental investigations is often higher than the level used for case management. Forty-five percent of the state programs and 37% of the local programs do *not* meet the current CDC guidelines (See Tables 6 and 7).

→ **Recommendations:**

- ◆ At a minimum, state and local programs should provide case management services and environmental investigations at the BLLs recommended by the CDC.
- ◆ When resources allow, case management services and environmental investigations should be offered to children with BLLs of 10 $\mu\text{g}/\text{dL}$ and above.

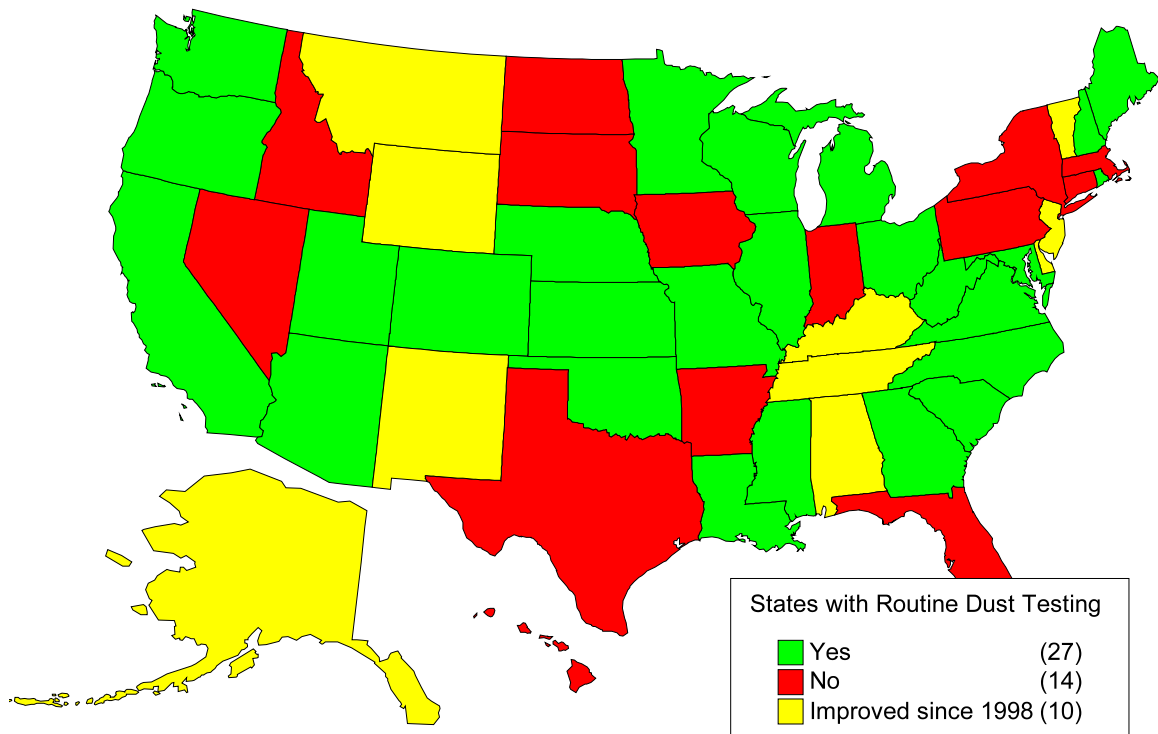
Dust Testing

Lead in household dust is the principle source of exposure for young children (Lanphear and Roghman, 1996; Lanphear et al, 1998; EPA, 2000). The best way to determine whether lead in dust is hazardous is to collect and analyze dust wipe samples (Matte, 1999). In 1998, 33 states reported that they incorporated dust testing into environmental investigations. In 2000, 37 state programs reported that they perform dust testing as a routine part of their environmental investigations for assessment purposes (See Table 8). Ten states, including Alabama, Alaska, Delaware, Kentucky, Montana, New Jersey, New Mexico, Tennessee, Utah, and West Virginia, that did not perform routine dust testing in 1998 were doing so in 2000 (See Figure 6). Although this is an improvement, the 14 states that do *not* routinely perform dust testing as part of environmental investigations, include four of 10 "Top Ten" states and provide follow-up services to an estimated 29% of U.S. children with BLLs \geq 20 $\mu\text{g}/\text{dL}$.

Table 8 – State Performance of Dust Testing as a Routine Part of Environmental Investigation, 2000

States That Include Dust Testing			States That Do <u>Not</u> Include Dust Testing
Alabama	Maryland	Oklahoma	Arkansas
Alaska	Michigan	Oregon	Connecticut
Arizona	Minnesota	Rhode Island	Florida
California	Mississippi	South Carolina	Hawaii
Colorado	Missouri	Tennessee	Idaho
Delaware	Montana	Utah	Indiana
District of Columbia	Nebraska	Vermont	Iowa
Georgia	New Hampshire	Virginia	Massachusetts
Illinois	New Jersey	Washington	Nevada
Kansas	New Mexico	West Virginia	New York
Kentucky	North Carolina	Wisconsin	North Dakota
Louisiana	Ohio	Wyoming	Pennsylvania
Maine			South Dakota
			Texas

**Figure 6
ROUTINE DUST TESTING BY STATES, 2000**



→ **Recommendation:**

- ◆ All programs should incorporate lead dust testing into their protocol as a routine part of environmental investigation.

Case Close-Out Criteria

As discussed in *Another Link in the Chain*, having case close-out criteria for case management is essential because it helps to delineate the responsibilities of programs and can be used to evaluate program success. In 1998, 73% of states (n=37) reported that they had specific case close-out criteria. In 2000, this number increased to 86% of states (n=44) and 100% of local programs (n=19) that we interviewed. While it is encouraging that some programs have developed close-out criteria since the time of the original survey, the close-out criteria vary greatly between programs. In 2000, 13 states (25%) reported that their case close-out criteria were based solely on BLLs, down from 15 states (29%) in 1998. *Another Link in the Chain* recommended specific case close-out criteria including three elements: reduction in a child's BLL; control of environmental lead hazards in the child's environment; and provisions for administrative closure. In 2000, only eight (16%) state and six (32%) local programs had adapted close-out criteria in line with these recommendations (See Table 9).

Table 9 - Programs Utilizing Recommended Case Close-Out Criteria, 2000

State Programs	Local Programs
District of Columbia	Jefferson County, MO
Louisiana	Los Angeles County, CA
New Hampshire	Milwaukee, WI
New Mexico	New York City, NY
Ohio	Philadelphia, PA
Pennsylvania	Pinellas County, FL
West Virginia	
Wisconsin	

→ **Recommendation:**

- ◆ All programs should adopt case close-out criteria that include a minimum of three elements: reduction in a child's BLL; control of environmental lead hazards in the child's environment; and provisions for administrative closure.

6. CHANGING PRACTICES/ EVALUATION

We were interested in whether programs used *Another Link in the Chain* to recommend or make changes to their program. Sixteen state (31%) and eight local (42%) programs reported that they had recommended changes based on information reported in *Another Link in the Chain*. Most of the programs recommended increasing the rates of reimbursement or making changes in policy. Other recommended changes include increasing screening, changing case

management practices, developing written protocols for environmental investigations, increasing dust testing, and increasing program evaluation.

Five state programs and two local programs reported that they had been successful in implementing change. Hawaii successfully used information from *Another Link in the Chain* to persuade their environmental health program to finalize their protocol for environmental investigations and agree to offer environmental investigations for all children with BLLs greater than or equal to 20 µg/dL. Virginia improved protocols for follow-up and case management. South Carolina developed written protocols for environmental investigations. California reviewed and finalized their case management practices. Alabama gave copies of the report to their state Medicaid officials and successfully corrected a problem with environmental billing. Pinellas County, Florida developed outcome measures for key components, revised protocols, and established case closure guidelines. Milwaukee, Wisconsin changed to a team model for case management using information from *Another Link in the Chain* as the rationale.

These success stories are encouraging and show that changes can be made to improve services for lead poisoned children.

→ **Recommendation:**

- ◆ All CLPPPs should evaluate how well their programs are able to provide follow-up services to children with elevated BLLs and how effective their follow-up efforts are at decreasing children's exposures and BLLs. Programs should use this information to advocate for needed resources and policy changes to improve outcomes for children with elevated BLLs in their jurisdictions.

RECOMMENDATIONS

DEVELOPING AND MAINTAINING AN INFRASTRUCTURE

- ◆ States should require laboratories to report *all* BLLs to the state CLPPP or to the State Health Department if no CLPPP exists.
- ◆ State and local programs without an effective system to identify new cases of childhood lead poisoning should give establishment of such a system high priority.
- ◆ States with low screening penetration rates within high-risk areas or populations, particularly the Medicaid population, should continue to emphasize the importance of routine screening.
- ◆ All CLPPPs should work with their state Medicaid agencies to ensure that high-risk children are screened and to secure adequate reimbursement for case management follow-up and environmental investigations.
- ◆ All programs should have a system in place to identify and track those children who receive case management services.
- ◆ Case management services should be offered to all children with elevated BLLs.

AVAILABILITY OF ADEQUATE RESOURCES

- ◆ State programs that currently do not receive Medicaid reimbursement for either case management or environmental investigation services should take steps immediately to obtain such reimbursement.
- ◆ Local programs in states with reimbursement available, which do not currently bill for services to Medicaid clients, should take steps immediately to secure reimbursement.
- ◆ Programs should track the costs associated with providing services in order to ensure that rates of reimbursement for case management and environmental investigations are based on actual costs for delivering these services and to bolster advocacy efforts for raising rates where necessary.
- ◆ State Medicaid programs should re-evaluate reimbursement rates based on cost and effectiveness of measures.

ABILITY TO ASSURE FOLLOW-UP CARE

- ◆ At a minimum, state and local programs should provide case management services and environmental investigations at the BLLs recommended by the CDC.
- ◆ When resources allow, case management services and environmental investigations should be offered to children with BLLs of 10 µg/dL and above.
- ◆ All programs should incorporate lead dust testing into their protocol as a routine part of environmental investigation.
- ◆ All programs should adopt case close-out criteria that include a minimum of three elements: reduction in a child's BLL; control of environmental lead hazards in the child's environment; and provisions for administrative closure.
- ◆ All CLPPPs should evaluate how well their programs are able to provide follow-up services to children with elevated BLLs and how effective their follow-up efforts are at decreasing children's exposures and BLLs. Programs should use this information to advocate for needed resources and policy changes to improve outcomes for children with elevated BLLs in their jurisdictions.

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APPENDIX

GLOSSARY OF ABBREVIATIONS

BLL	Blood lead level
CDC	U.S. Centers for Disease Control and Prevention
CLPP	Childhood lead poisoning prevention
CLPPP	Childhood lead poisoning prevention program
CM	Case management
CMS	Centers for Medicare and Medicaid Services, formerly the U.S. Health Care Financing Administration (HCFA)
EI	Environmental investigation to determine the source(s) of lead exposure for a poisoned child
$\mu\text{g}/\text{dL}$	Micrograms per deciliter, the common unit of blood lead measurement

CHAPTER 3: DESCRIPTION OF PROGRESS REPORTS

The following individual progress reports are based on information that programs provided to us in both the follow-up (conducted in 2000) and the original surveys (conducted in 1998). These reports focus on key indicators of a comprehensive and successful program. Where possible, we compared information between the two surveys to assess whether or not programs are moving in the right direction.

CDC Grantee: Indicates whether or not a state or local program received CDC grant funding for the fiscal year 2000 for either Childhood Lead Poisoning Prevention (CLPP) or Surveillance.

Predictors of Risk for CLP: Identifies the number and percentage of pre-1950 housing units. For states, these numbers are based on 2000 U.S. Census Supplementary Survey data. For local jurisdictions they are based on the 1990 U.S. Census data.

Initiates Case Management: Identifies the BLL used to begin case management services as reported by the individual program.

Initiates Environmental Investigations: Identifies the BLL used to begin an environmental investigation as reported by the individual program.

Number of Children identified with BLL \geq 20 $\mu\text{g}/\text{dL}$: In the follow-up survey, programs were asked to report the number of children identified with BLLs greater than or equal to 20 $\mu\text{g}/\text{dL}$ for the year 1998. Because the survey started in February of 2000, we expected that programs would have accurate information for 1998. This information is presented in the table along with the number of children reported in the previous survey for the year 1997.

Number of Environmental Investigations Completed: Programs were asked to report the number of environmental investigations that were completed in 1998.

KEY INDICATORS

Each progress report contains a list of key indicators, which are essential components of a competent childhood lead poisoning prevention program. A checkmark (✓) indicates that the program meets the criteria for having the specific key indicator. An asterisk (*) indicates that the program has partially met the criteria. In such a case, an explanation is given in the text section following.

Requires laboratory reporting of ALL blood lead levels

State programs were asked if their state required reporting of *all* BLLs. Only states that require reporting of all BLLs received a checkmark in this category. Many states require reporting of BLLs \geq 10 or 15 $\mu\text{g}/\text{dL}$, and did not receive a checkmark for this question.

States that reported pending legislation that would require reporting of all BLLs received an asterisk. This indicator was reported in the follow-up survey conducted in 2000 and was not asked of local programs.

Meets recommended Case Management close-out criteria

Another Link in the Chain recommended that all programs identify specific criteria to close a case, including a minimum of three elements: reduction in a child's BLL, control of environmental lead hazards, and provision for administrative closure. In the follow-up survey programs were asked whether or not they had specific case close-out criteria and if so, what were the elements. Only programs that included the three recommended elements received a checkmark on the progress reports.

Able to identify the number of Children on Medicaid

Programs were asked to report the number of children with BLLs greater than or equal to 20 µg/dL who received Medicaid for the year 1998. If programs were able to identify a *specific* number, checkmarks were given. For programs that reported they could provide this information for following years, an asterisk and explanation in the text was given.

Receives Medicaid reimbursement for Case Management

In both the original survey conducted in 1998 and the follow-up survey conducted in 2000, programs reported whether or not they received Medicaid reimbursement for case management. A checkmark was given if programs reported receiving reimbursement. An asterisk and explanation in the text is given for states that reported that they were moving toward Medicaid reimbursement for case management. This information was not verified with Medicaid agencies.

Has specific case close-out criteria

This indicator was reported on both the original survey and the follow-up survey. Programs reporting that they had a standard for close-out of cases received a checkmark. This criterion addressed only the question of whether or not programs reported having specific standards. It did not examine the completeness of the close-out criteria.

Includes dust wipe testing as a routine part of Environmental Investigations

In both the original and follow-up surveys, programs were asked whether dust testing was done routinely as part of a comprehensive environmental investigation. If programs reported that they did, a checkmark was given on the progress report.

Receives Medicaid reimbursement for Environmental Investigations

Programs received a checkmark if they reported that they received Medicaid reimbursement for environmental investigations. No attempt was made to determine if the funds received were adequate and the information was not verified with Medicaid agencies.

STATE PROGRESS REPORTS

ALABAMA

CDC Grantee: Yes/ CLPPP

Predictors of Risk for CLP: 273,126 Pre-50 Housing Units, 13.9 % Pre-1950 Housing

Initiates Case Management at 15 µg/dL.

Initiates Environmental Investigations at 15 µg/dL.

	1997	1998
Number of Children identified with BLL \geq 20 µg/dL	144	313
Number of Environmental Investigations completed	130	167

	Key Indicators
*	1. Requires laboratory reporting of ALL blood lead levels
	2. Meets recommended Case Management close-out criteria
	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
✓	✓	1. Receives Medicaid reimbursement for Case Management
✓	✓	2. Has specific case close-out criteria
	✓	3. Includes dust wipe testing as a routine part of Environmental Investigations
✓	✓	4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. Starting in 2001, the BLL trigger for case management will drop to 10 µg/dL.
2. *Another Link in the Chain* was distributed to state Medicaid personnel. As a result, a problem was corrected with environmental billing and now the CLPPP is able to bill.
3. The program is trying to increase reporting of screenings, since the managed care screening rate within the state has decreased 50%.
4. Pending legislation:
 - a. A coalition has proposed legislation to require lead screening for school or daycare and to post the results on the child's immunization card (the blue card).
 - b. * Legislation is pending that would require reporting of all BLLs or require analysis of screening tests at the state lab.
5. Medicaid reimbursement:
 - a. Program receives \$36 per hour for case management. This amount remains unchanged since the fall of 1998.
 - b. Program receives \$280 per case for environmental investigations. This is an increase since the fall of 1998.

CHAPTER 3: STATE PROGRESS REPORTS

ALASKA

CDC Grantee: Yes/Surveillance

Predictors of Risk for CLP: 13,291 Pre-50 Housing Units, 5.0 % Pre-1950 Housing

Initiates Case Management at 10 µg/dL.

Initiates Environmental Investigations at 10 µg/dL.

	1997	1998
Number of Children identified with BLL \geq 20 µg/dL	0	0
Number of Environmental Investigations completed	0	0

	Key Indicators
	1. Requires laboratory reporting of ALL blood lead levels
	2. Meets recommended Case Management close-out criteria
n/a	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
		1. Receives Medicaid reimbursement for Case Management
	✓	2. Has specific case close-out criteria
	✓	3. Includes dust wipe testing as a routine part of Environmental Investigations
		4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments: None

ARIZONA

CDC Grantee: Yes/CLPPP

Predictors of Risk for CLP: 96,017 Pre-50 Housing Units, 4.4 % Pre-1950 Housing

Initiates Case Management at 10 µg/dL.

Initiates Environmental Investigations at 20 µg/dL and for repeated levels of 15 to 19 µg/dL.

	1997	1998
Number of Children identified with BLL \geq 20 µg/dL	60	36
Number of Environmental Investigations completed	40	70

	Key Indicators
	1. Requires laboratory reporting of ALL blood lead levels
	2. Meets recommended Case Management close-out criteria
	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
		1. Receives Medicaid reimbursement for Case Management
✓	✓	2. Has specific case close-out criteria
✓	✓	3. Includes dust wipe testing as a routine part of Environmental Investigations
		4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments: None

ARKANSAS

CDC Grantee: No

Predictors of Risk for CLP: 162,600 Pre-50 Housing Units, 13.9 % Pre-1950 Housing

Initiates Case Management at the state office at 20 µg/dL. For children with BLLs 10 to 19 µg/dL, public health nurses working under written policy parameters do case management at the local health department level.

Initiates Environmental Investigations at 20 µg/dL, or for levels of 15 to 19 µg/dL if requested by private physician.

	1997	1998
Number of Children identified with BLL \geq 20 µg/dL	44	44
Number of Environmental Investigations completed	136	75

	Key Indicators
	1. Requires laboratory reporting of ALL blood lead levels
	2. Meets recommended Case Management close-out criteria
	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
		1. Receives Medicaid reimbursement for Case Management
✓	✓	2. Has specific case close-out criteria
		3. Includes dust wipe testing as a routine part of Environmental Investigations
		4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments: None

CALIFORNIA

CDC Grantee: Yes/ CLPPP

Predictors of Risk for CLP: 2,228,107 Pre-50 Housing Units, 18.2 % Pre-1950 Housing

Initiates Case Management at 15 µg/dL.

Initiates Environmental Investigations at 15 µg/dL.

	1997	1998
Number of Children identified with BLL \geq 20 µg/dL	1,000+	797
Number of Environmental Investigations completed	Unknown	666

	Key Indicators
*	1. Requires laboratory reporting of ALL blood lead levels
	2. Meets recommended Case Management close-out criteria
	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
✓	✓	1. Receives Medicaid reimbursement for Case Management
✓	✓	2. Has specific case close-out criteria
✓	✓	3. Includes dust wipe testing as a routine part of Environmental Investigations
✓	✓	4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. The CLPP Branch used information from *Another Link in the Chain* as part of the review of case management procedures and is currently finalizing new guidelines for public health nursing case management.
2. * Regulations are pending to require universal reporting of BLLs.
3. Medicaid reimbursement:
 - a. For case management, the program receives Medicaid reimbursement as a lump sum within their budget.
 - b. For environmental investigations, the program receives \$270 per initial investigation, and \$270 per follow-up investigation when the home or primary residence changes *and* the BLL increases above the last level recorded prior to the change of residence.

COLORADO

CDC Grantee: Yes/CLPPP

Predictors of Risk for CLP: 245,383 Pre-50 Housing Units, 13.6 % Pre-1950 Housing

Initiates Case Management at 10 µg/dL.

Initiates Environmental Investigations at 20 µg/dL and for 2 repeated levels of 15 to 19 µg/dL within a 90 day period.

	1997	1998
Number of Children identified with BLL \geq 20 µg/dL	25	76
Number of Environmental Investigations completed	23	76

	Key Indicators
	1. Requires laboratory reporting of ALL blood lead levels
	2. Meets recommended Case Management close-out criteria
	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
		1. Receives Medicaid reimbursement for Case Management
		2. Has specific case close-out criteria
✓	✓	3. Includes dust wipe testing as a routine part of Environmental Investigations
		4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. The program has been attempting to secure Medicaid reimbursement for case management for the past year, but Medicaid has indicated that a nurse or physician must provide the case management services.

CONNECTICUT

CDC Grantee: Yes/CLPPP

Predictors of Risk for CLP: 462,808 Pre-50 Housing Units, 32.5 % Pre-1950 Housing

Initiates Case Management at 20 µg/dL.

Initiates Environmental Investigations at 20 µg/dL and for repeated levels of 15 to 19 µg/dL.

	1997	1998
Number of Children identified with BLL \geq 20 µg/dL	800	Approx. 500
Number of Environmental Investigations completed	Approx. 800	Approx. 500

	Key Indicators
✓	1. Requires laboratory reporting of ALL blood lead levels
	2. Meets recommended Case Management close-out criteria
	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
		1. Receives Medicaid reimbursement for Case Management
✓	✓	2. Has specific case close-out criteria
✓	*	3. Includes dust wipe testing as a routine part of Environmental Investigations
		4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. The local health departments provide the case management.
2. The state program is currently working on a draft of policies and procedures for case close-out criteria.
3. * Note: In 1998, dust wipe testing was optional as part of the environmental investigation for assessment purposes. In 2000, the program recommends that dust wipe testing be done for assessment purposes, however, it is not mandated.

DELAWARE

CDC Grantee: Yes/CLPPP

Predictors of Risk for CLP: 62,783 Pre-50 Housing Units, 18.3 % Pre-1950 Housing

Initiates Case Management at 15 µg/dL.

Initiates Environmental Investigations at 20 µg/dL.

	1997	1998
Number of Children identified with BLL \geq 20 µg/dL	68	34
Number of Environmental Investigations completed	48	47

	Key Indicators
✓	1. Requires laboratory reporting of ALL blood lead levels
	2. Meets recommended Case Management close-out criteria
*	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
	**	1. Receives Medicaid reimbursement for Case Management
✓	✓	2. Has specific case close-out criteria
	***	3. Includes dust wipe testing as a routine part of Environmental Investigations
	**	4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. * Program reports ability to identify the number of children on Medicaid after 1998.
2. ** Program is currently talking with Medicaid about increasing screening and dealing with Managed Care Organizations. The next step is to discuss Medicaid reimbursement for case management and environmental investigations.
3. *** Program is just beginning to include dust wipe testing as a routine part of environmental investigations.
4. Protocol is currently being revised to begin case management at 10 µg/dL.

DISTRICT OF COLUMBIA

CDC Grantee: Yes/CLPPP

Predictors of Risk for CLP: 152,159 Pre-50 Housing Units, 55.4 % Pre-1950 Housing

Initiates Case Management at 15 µg/dL.

Initiates Environmental Investigations at 15 µg/dL.

	1997	1998
Number of Children identified with BLL \geq 20 µg/dL	171	36
Number of Environmental Investigations completed	Approx. 86	Unknown

	Key Indicators
✓	1. Requires laboratory reporting of ALL blood lead levels
✓	2. Meets recommended Case Management close-out criteria
	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
		1. Receives Medicaid reimbursement for Case Management
✓	✓	2. Has specific case close-out criteria
✓	✓	3. Includes dust wipe testing as a routine part of Environmental Investigations
		4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. Program has accurate data on the number of environmental investigations being performed as of January 1, 1999.

FLORIDA

CDC Grantee: Yes /Surveillance

Predictors of Risk for CLP: 481,580 Pre-50 Housing Units, 6.6 % Pre-1950 Housing

Initiates Case Management at 10 µg/dL.

Initiates Environmental Investigations at 20 µg/dL, or at 15 µg/dL if resources allow.

	1997	1998
Number of Children identified with BLL \geq 20 µg/dL	Unknown	86
Number of Environmental Investigations completed	Unknown	Unknown

	Key Indicators
	1. Requires laboratory reporting of ALL blood lead levels
	2. Meets recommended Case Management close-out criteria
	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
✓	✓	1. Receives Medicaid reimbursement for Case Management
✓	✓	2. Has specific case close-out criteria
✓	*	3. Includes dust wipe testing as a routine part of Environmental Investigations
✓	✓	4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. * Currently, the local health departments do routine dust wipe testing for assessment purposes only when resources allow.
2. Case management and environmental investigations are reimbursable via the County Health Department's cost reports that are submitted to Medicaid.

GEORGIA

CDC Grantee: No

Predictors of Risk for CLP: 376,897 Pre-50 Housing Units, 11.5 % Pre-1950 Housing

Initiates Case Management at 15 µg/dL.

Initiates Environmental Investigations at 20 µg/dL and for repeated levels of 15 to 19 µg/dL.

	1997	1998
Number of Children identified with BLL \geq 20 µg/dL	Unknown	Unknown
Number of Environmental Investigations completed	Unknown	Unknown

	Key Indicators
	1. Requires laboratory reporting of ALL blood lead levels
	2. Meets recommended Case Management close-out criteria
	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
		1. Receives Medicaid reimbursement for Case Management
		2. Has specific case close-out criteria
✓	✓	3. Includes dust wipe testing as a routine part of Environmental Investigations
✓	✓	4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. Medicaid reimburses \$229.60 per initial environmental investigation and \$197.34 for one follow-up visit.

HAWAII

CDC Grantee: Yes/ Surveillance

Predictors of Risk for CLP: 39,736 Pre-50 Housing Units, 8.6 % Pre-1950 Housing

Initiates Case Management at 10 µg/dL.

Initiates Environmental Investigations at 20 µg/dL.

	1997	1998
Number of Children identified with BLL \geq 20 µg/dL	16	7
Number of Environmental Investigations completed	16	1

	Key Indicators
*	1. Requires laboratory reporting of ALL blood lead levels
	2. Meets recommended Case Management close-out criteria
	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
		1. Receives Medicaid reimbursement for Case Management
	✓	2. Has specific case close-out criteria
		3. Includes dust wipe testing as a routine part of Environmental Investigations
		4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. Program used *Another Link in the Chain* to meet with environmental health program personnel to formalize a protocol and agree to offer environmental investigations for all children with BLLs \geq 20 µg/dL.
2. Program started conducting environmental investigations in October 1998.
3. * Although, state does not *require* laboratory reporting of ALL BLLs, they report that they do receive reporting on all levels.

IDAHO

CDC Grantee: No

Predictors of Risk for CLP: 102,926 Pre-50 Housing Units, 19.5 % Pre-1950 Housing

Initiates Case Management at 15 µg/dL.

Initiates Environmental Investigations at 20 µg/dL.

	1997	1998
Number of Children identified with BLL \geq 20 µg/dL	Unknown	4
Number of Environmental Investigations completed	Approx. 170	2

	Key Indicators
	1. Requires laboratory reporting of ALL blood lead levels
	2. Meets recommended Case Management close-out criteria
	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
		1. Receives Medicaid reimbursement for Case Management
		2. Has specific case close-out criteria
✓		3. Includes dust wipe testing as a routine part of Environmental Investigations
		4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments: None

ILLINOIS

CDC Grantee: Yes/CLPPP

Predictors of Risk for CLP: 1,647,495 Pre-50 Housing Units, 33.7 % Pre-1950 Housing

Initiates Case Management at 20 µg/dL, and some of the local health departments offer case management at levels less than 20 µg/dL.

Initiates Environmental Investigations at 25 µg/dL, or at lower levels if the MD requests it.

	1997	1998
Number of Children identified with BLL \geq 20 µg/dL	8,140	5,365
Number of Environmental Investigations completed	193	Unknown

	Key Indicators
✓	1. Requires laboratory reporting of ALL blood lead levels
	2. Meets recommended Case Management close-out criteria
	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
		1. Receives Medicaid reimbursement for Case Management
✓	✓	2. Has specific case close-out criteria
✓	✓	3. Includes dust wipe testing as a routine part of Environmental Investigations
✓	✓	4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. Program is currently using information from *Another Link in the Chain* to negotiate Medicaid reimbursement for case management and to secure an increase in reimbursement for environmental investigations. Currently they receive \$43.75 per environmental investigation.
2. Local agencies can receive minimal reimbursement for blood draws and laboratory analysis, but not for complete case management activities.

INDIANA

CDC Grantee: Yes/CLPPP

Predictors of Risk for CLP: 731,657 Pre-50 Housing Units, 28.9 % Pre-1950 Housing

Initiates Case Management at 20 µg/dL.

Initiates Environmental Investigations at 20 µg/dL.

	1997	1998
Number of Children identified with BLL \geq 20 µg/dL	430	354
Number of Environmental Investigations completed	1,054	227

	Key Indicators
*	1. Requires laboratory reporting of ALL blood lead levels
	2. Meets recommended Case Management close-out criteria
**	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
		1. Receives Medicaid reimbursement for Case Management
✓	✓	2. Has specific case close-out criteria
		3. Includes dust wipe testing as a routine part of Environmental Investigations
		4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. The program has shared some of the information from *Another Link in the Chain* with Medicaid to try to secure Medicaid reimbursement for case management and environmental investigation.
2. *Mandatory reporting is currently in place for BLLs >10 µg/dL. Program intends to propose new regulations requiring mandatory reporting of all levels.
3. **As of 1999, the program is able to identify the number of children receiving Medicaid.

IOWA

CDC Grantee: Yes/CLPPP

Predictors of Risk for CLP: 492,888 Pre-50 Housing Units, 40.0 % Pre-1950 Housing

Initiates Case Management at 10 µg/dL.

Initiates Environmental Investigations at 20 µg/dL and for repeated levels of 15 to 19 µg/dL.

	1997	1998
Number of Children identified with BLL \geq 20 µg/dL	360	247
Number of Environmental Investigations completed	Approx. 425	342

	Key Indicators
✓	1. Requires laboratory reporting of ALL blood lead levels
	2. Meets recommended Case Management close-out criteria
✓	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
✓	✓	1. Receives Medicaid reimbursement for Case Management
✓	✓	2. Has specific case close-out criteria
		3. Includes dust wipe testing as a routine part of Environmental Investigations
✓	✓	4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. The reimbursement rates for case management and environmental investigations are based on average costs for each agency. Therefore the rate varies from agency to agency.

CHAPTER 3: STATE PROGRESS REPORTS

KANSAS

CDC Grantee: No

Predictors of Risk for CLP: 337,047 Pre-50 Housing Units, 29.8 % Pre-1950 Housing

Initiates Case Management at 20 µg/dL.

Initiates Environmental Investigations at 20 µg/dL.

	1997	1998
Number of Children identified with BLL \geq 20 µg/dL	165	129
Number of Environmental Investigations completed	Unknown	13

	Key Indicators
	1. Requires laboratory reporting of ALL blood lead levels
	2. Meets recommended Case Management close-out criteria
	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
		1. Receives Medicaid reimbursement for Case Management
		2. Has specific case close-out criteria
✓	✓	3. Includes dust wipe testing as a routine part of Environmental Investigations
		4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments: None

KENTUCKY

CDC Grantee: No

Predictors of Risk for CLP: 331,395 Pre-50 Housing Units, 18.9 % Pre-1950 Housing

Initiates Case Management at 20 µg/dL.

Initiates Environmental Investigations at 20 µg/dL and for repeated levels of 15 to 19 µg/dL.

	1997	1998
Number of Children identified with BLL \geq 20 µg/dL	396	Estimated 200
Number of Environmental Investigations completed	Unknown	Unknown

	Key Indicators
	1. Requires laboratory reporting of ALL blood lead levels
	2. Meets recommended Case Management close-out criteria
	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
		1. Receives Medicaid reimbursement for Case Management
✓	✓	2. Has specific case close-out criteria
	✓	3. Includes dust wipe testing as a routine part of Environmental Investigations
	✓	4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. Medicaid reimburses \$297.00 per initial environmental investigations and \$197.00 per follow-up investigation.

LOUISIANA

CDC Grantee: Yes/CLPPP

Predictors of Risk for CLP: 340,372 Pre-50 Housing Units, 18.4 % Pre-1950 Housing

Initiates Case Management at 15 µg/dL.

Initiates Environmental Investigations at 20 µg/dL.

	1997	1998
Number of Children identified with BLL \geq 20 µg/dL	Unknown	Unknown
Number of Environmental Investigations completed	Unknown	Unknown

	Key Indicators
✓	1. Requires laboratory reporting of ALL blood lead levels
✓	2. Meets recommended Case Management close-out criteria
	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
		1. Receives Medicaid reimbursement for Case Management
✓	✓	2. Has specific case close-out criteria
✓	✓	3. Includes dust wipe testing as a routine part of Environmental Investigations
✓	✓	4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. A state surveillance system was recently instituted.
2. The program is using information from *Another Link in the Chain* to push for changes in Medicaid reimbursement.
3. Currently Medicaid reimburses \$38 per initial environmental investigation and \$38 per follow-up environmental investigation. This rate of reimbursement has not changed since the fall of 1998.

CHAPTER 3: STATE PROGRESS REPORTS

MAINE

CDC Grantee: Yes/CLPPP

Predictors of Risk for CLP: 242,716 Pre-50 Housing Units, 37.2 % Pre-1950 Housing

Initiates Case Management at 20 µg/dL.

Initiates Environmental Investigations at 20 µg/dL.

	1997	1998
Number of Children identified with BLL \geq 20 µg/dL	60	80
Number of Environmental Investigations completed	60	39

	Key Indicators
✓	1. Requires laboratory reporting of ALL blood lead levels
	2. Meets recommended Case Management close-out criteria
✓	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
✓	✓	1. Receives Medicaid reimbursement for Case Management
	✓	2. Has specific case close-out criteria
✓	✓	3. Includes dust wipe testing as a routine part of Environmental Investigations
	✓	4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. Medicaid reimbursement:
 - a. Case management funding is through “coordinated activities” that are not specific for lead.
 - b. \$500 per case for environmental investigations. The program has only recently been able to bill for environmental investigations.

MARYLAND

CDC Grantee: Yes/ CLPPP

Predictors of Risk for CLP: 464,825 Pre-50 Housing Units, 21.7 % Pre-1950 Housing

Initiates Case Management at 20 µg/dL and for repeated levels of 15 to 19 µg/dL.

Initiates Environmental Investigations at 20 µg/dL and for repeated levels of 15 to 19 µg/dL.

	1997	1998
Number of Children identified with BLL \geq 20 µg/dL	546	772
Number of Environmental Investigations completed	547	Unknown

	Key Indicators
✓	1. Requires laboratory reporting of ALL blood lead levels
	2. Meets recommended Case Management close-out criteria
	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
✓	✓	1. Receives Medicaid reimbursement for Case Management
✓	✓	2. Has specific case close-out criteria
✓	✓	3. Includes dust wipe testing as a routine part of Environmental Investigations
		4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. Legislation is pending within the state to increase environmental investigations and improve enforcement.

MASSACHUSETTS

CDC Grantee: Yes/ CLPPP

Predictors of Risk for CLP: 1,132,951 Pre-50 Housing Units, 43.2 % Pre-1950 Housing

Initiates Case Management at 15 µg/dL.

Initiates Environmental Investigations at 25 µg/dL.

	1997	1998
Number of Children identified with BLL \geq 20 µg/dL	823	775
Number of Environmental Investigations completed	Unknown	12,048

	Key Indicators
✓	1. Requires laboratory reporting of ALL blood lead levels
	2. Meets recommended Case Management close-out criteria
	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
✓	✓	1. Receives Medicaid reimbursement for Case Management
✓	✓	2. Has specific case close-out criteria
		3. Includes dust wipe testing as a routine part of Environmental Investigations
		4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. Nursing agencies can bill Medicaid for their services, but state and local health departments do not receive Medicaid reimbursement for case management services.

MICHIGAN

CDC Grantee: Yes/CLPPP

Predictors of Risk for CLP: 1,228,369 Pre-50 Housing Units, 29.0 % Pre-1950 Housing

Initiates Case Management at 10 µg/dL.

Most Environmental Investigations initiated at 20 µg/dL due to resources at the local level, however Medicaid will reimburse at 10 µg/dL.

	1997	1998
Number of Children identified with BLL \geq 20 µg/dL	696	1,215
Number of Environmental Investigations completed	Unknown	659

	Key Indicators
✓	1. Requires laboratory reporting of ALL blood lead levels
	2. Meets recommended Case Management close-out criteria
*	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
✓	✓	1. Receives Medicaid reimbursement for Case Management
	✓	2. Has specific case close-out criteria
✓	✓	3. Includes dust wipe testing as a routine part of Environmental Investigations
✓	✓	4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

- * Starting in 2000, the program will be able to identify the number of lead-poisoned children that receive Medicaid.
- The local programs receive Medicaid reimbursement: \$70 for a nursing visit (2 allowed), \$100 for an environmental investigation, and \$70 for a follow-up environmental investigation.

MINNESOTA

CDC Grantee: Yes/CLPPP

Predictors of Risk for CLP: 649,979 Pre-50 Housing Units, 31.5 % Pre-1950 Housing
Initiates Environmental Investigations at 20 µg/dL.

	1997	1998
Number of Children identified with BLL \geq 20 µg/dL	358	283
Number of Environmental Investigations completed	Unknown	283

	Key Indicators
✓	1. Requires laboratory reporting of ALL blood lead levels
	2. Meets recommended Case Management close-out criteria
	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
✓	✓	1. Receives Medicaid reimbursement for Case Management
✓	✓	2. Has specific case close-out criteria
✓	✓	3. Includes dust wipe testing as a routine part of Environmental Investigations
		4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. The state program does not provide or oversee nursing case management.
2. The program has used information from *Another Link in the Chain* to develop case management practices for the future.
3. Medicaid reimbursement is negotiated at a local level, not a state level.

MISSISSIPPI

CDC Grantee: No

Predictors of Risk for CLP: 135,348 Pre-50 Housing Units, 11.6 % Pre-1950 Housing
Initiates Case Management at 20 µg/dL and for repeated levels of 15 to 19 µg/dL.
Initiates Environmental Investigations at 20 µg/dL and for repeated levels of 15 to 19 µg/dL.

	1997	1998
Number of Children identified with BLL \geq 20 µg/dL	93	71
Number of Environmental Investigations completed	132	165

	Key Indicators
	1. Requires laboratory reporting of ALL blood lead levels
	2. Meets recommended Case Management close-out criteria
✓	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
		1. Receives Medicaid reimbursement for Case Management
✓	✓	2. Has specific case close-out criteria
✓	✓	3. Includes dust wipe testing as a routine part of Environmental Investigations
		4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. Last year, the program submitted a request for Medicaid reimbursement for environmental investigations. They reviewed *Another Link in the Chain* when writing the proposal.

MISSOURI

CDC Grantee: Yes/CLPPP

Predictors of Risk for CLP: 658,599 Pre-50 Housing Units, 27.0 % Pre-1950 Housing

Initiates Case Management at 15 µg/dL.

Initiates Environmental Investigations at 20 µg/dL and for repeated levels of 15 to 19 µg/dL.

	1997	1998
Number of Children identified with BLL \geq 20 µg/dL	Unknown	507
Number of Environmental Investigations completed	2,548	636

	Key Indicators
*	1. Requires laboratory reporting of ALL blood lead levels
	2. Meets recommended Case Management close-out criteria
	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
	✓	1. Receives Medicaid reimbursement for Case Management
✓	✓	2. Has specific case close-out criteria
✓	✓	3. Includes dust wipe testing as a routine part of Environmental Investigations
	✓	4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. * The program is trying to change laws to require reporting of ALL BLLs.
2. They have used information from *Another Link in the Chain* to:
 - a. try to mandate laws for lead testing
 - b. try to obtain more funding
 - c. try to increase evaluation
 - d. try to get more money for remediation.
3. The state has three bills pending that would provide tax incentives for remediation.
4. Medicaid reimbursement:
 - a. The current rate of Medicaid reimbursement for case management is \$50 for the initial visit and \$40 for follow-up visits. This rate has not changed since 1998.
 - b. The current rate of Medicaid reimbursement for environmental investigations is \$161 per initial visit, \$81 for a follow-up visit, and \$40 for subsequent visits. These rates have increased 13% since 1998.
5. The state has conducted a survey in the private sector to determine costs including travel expenses to justify increased funding.

MONTANA

CDC Grantee: Yes/CLPPP

Predictors of Risk for CLP: 106,617 Pre-50 Housing Units, 25.8 % Pre-1950 Housing

Initiates Case Management at 20 µg/dL.

Initiates Environmental Investigations at 20 µg/dL.

	1997	1998
Number of Children identified with BLL ≥20 µg/dL	20	1
Number of Environmental Investigations completed	20	Approximately 15

	Key Indicators
	1. Requires laboratory reporting of ALL blood lead levels
	2. Meets recommended Case Management close-out criteria
	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
		1. Receives Medicaid reimbursement for Case Management
✓	✓	2. Has specific case close-out criteria
	✓	3. Includes dust wipe testing as a routine part of Environmental Investigations
		4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. State is currently drafting an administrative rule to be put in place in six months that would require BLLs above 10 µg/dL to be reported.

NEBRASKA

CDC Grantee: Yes/CLPPP

Predictors of Risk for CLP: 252,985 Pre-50 Housing Units, 35.0 % Pre-1950 Housing

Initiates Case Management at 15 µg/dL.

Initiates Environmental Investigations at 20 µg/dL and for repeated levels of 15 to 19 µg/dL.

	1997	1998
Number of Children identified with BLL ≥20 µg/dL	97	110
Number of Environmental Investigations completed	Approx. 200	Unknown

	Key Indicators
✓	1. Requires laboratory reporting of ALL blood lead levels
	2. Meets recommended Case Management close-out criteria
	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
		1. Receives Medicaid reimbursement for Case Management
✓	✓	2. Has specific case close-out criteria
✓	✓	3. Includes dust wipe testing as a routine part of Environmental Investigations
✓	✓	4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. The program receives \$100 from Medicaid per environmental investigation. This rate remains unchanged since 1998.

CHAPTER 3: STATE PROGRESS REPORTS

NEVADA

CDC Grantee: No

Predictors of Risk for CLP: 34,393 Pre-50 Housing Units, 4.2 % Pre-1950 Housing

	1997	1998
Number of Children identified with BLL \geq 20 μ g/dL	Unknown	Unknown
Number of Environmental Investigations completed	Unknown	Unknown

	Key Indicators
	1. Requires laboratory reporting of ALL blood lead levels
	2. Meets recommended Case Management close-out criteria
	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
		1. Receives Medicaid reimbursement for Case Management
		2. Has specific case close-out criteria
		3. Includes dust wipe testing as a routine part of Environmental Investigations
		4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. The state does not have a program. An EPA project in Las Vegas and Reno looking at pre-1978 housing has not identified a problem with lead.
2. The state has no follow-up protocol. Cases are infrequent and they deal with each case when it arises.

NEW HAMPSHIRE

CDC Grantee: Yes/CLPPP

Predictors of Risk for CLP: 163,473 Pre-50 Housing Units, 29.9 % Pre-1950 Housing

Initiates Case Management at 15 μ g/dL.

Initiates Environmental Investigations at 20 μ g/dL.

	1997	1998
Number of Children identified with BLL \geq 20 μ g/dL	229	68
Number of Environmental Investigations completed	119	Unknown

	Key Indicators
✓	1. Requires laboratory reporting of ALL blood lead levels
✓	2. Meets recommended Case Management close-out criteria
	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
		1. Receives Medicaid reimbursement for Case Management
✓	✓	2. Has specific case close-out criteria
✓	✓	3. Includes dust wipe testing as a routine part of Environmental Investigations
		4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. There is current legislation pending within the state that will 1) establish a committee to study environmental health risks and service delivery issues and 2) allow for lead clearance technicians.

NEW JERSEY

CDC Grantee: Yes/ CLPPP

Predictors of Risk for CLP: 1,043,300 Pre-50 Housing Units, 31.5 % Pre-1950 Housing

Initiates Case Management at 20 µg/dL

Initiates Environmental Investigations at 20 µg/dL, and sometimes for levels of 15 to 19 µg/dL.

	1997	1998
Number of Children identified with BLL ≥20 µg/dL	2,038	2,071
Number of Environmental Investigations completed	1,214	1,204

	Key Indicators
✓	1. Requires laboratory reporting of ALL blood lead levels
	2. Meets recommended Case Management close-out criteria
*	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
		1. Receives Medicaid reimbursement for Case Management
✓	✓	2. Has specific case close-out criteria
	✓	3. Includes dust wipe testing as a routine part of Environmental Investigations
✓	✓	4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

- * Program is currently trying to link with Medicaid data.
- Program tracks data by fiscal year, not calendar year.
 - Program receives \$130 reimbursement per initial environmental investigation and \$50 per follow-up environmental investigation.

NEW MEXICO

CDC Grantee: Yes/ CLPPP

Predictors of Risk for CLP: 100,968 Pre-50 Housing Units, 12.9 % Pre-1950 Housing

Initiates Case Management at 20 µg/dL.

Initiates Environmental Investigations at 20 µg/dL, or at 15 to 19 µg/dL if a repeat BLL shows a rising level or siblings have elevated BLLs.

	1997	1998
Number of Children identified with BLL ≥20 µg/dL	12	22
Number of Environmental Investigations completed	Approx 25	Unknown

	Key Indicators
✓	1. Requires laboratory reporting of ALL blood lead levels
✓	2. Meets recommended Case Management close-out criteria
	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
		1. Receives Medicaid reimbursement for Case Management
✓	✓	2. Has specific case close-out criteria
	✓	3. Includes dust wipe testing as a routine part of Environmental Investigations
		4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments: None

NEW YORK

CDC Grantee: Yes/CLPPP

Predictors of Risk for CLP: 3,551,180 Pre-50 Housing Units, 46.2 % Pre-1950 Housing

Initiates Case Management at 10 µg/dL.

Initiates Environmental Investigations at 20 µg/dL, and for levels 10 to 19 µg/dL if resources are available.

	1997	1998
Number of Children identified with BLL \geq 20 µg/dL	5,588	1,655
Number of Environmental Investigations completed	7,829	2,866

	Key Indicators
✓	1. Requires laboratory reporting of ALL blood lead levels
	2. Meets recommended Case Management close-out criteria
	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
✓	✓	1. Receives Medicaid reimbursement for Case Management
✓	✓	2. Has specific case close-out criteria
		3. Includes dust wipe testing as a routine part of Environmental Investigations
		4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. Each case goes through a regional rate setting process to determine the rate of case management reimbursement.
2. Currently environmental investigations are reimbursed through a state grant and Medicaid reimbursement is not yet available.

NORTH CAROLINA

CDC Grantee: Yes/ CLPPP

Predictors of Risk for CLP: 475,885 Pre-50 Housing Units, 13.5 % Pre-1950 Housing

Case Management is reimbursable at 20 µg/dL, at 15 µg/dL home visits are completed, at 10 µg/dL education and nutritional counseling are offered in a clinic setting.

Environmental investigations are provided for persistent BLLs > 15 µg/dL. Also are offered at 10 µg/dL, but frequently refused.

	1997	1998
Number of Children identified with BLL \geq 20 µg/dL	151	79
Number of Environmental Investigations completed	Unknown	Approx. 134

	Key Indicators
✓	1. Requires laboratory reporting of ALL blood lead levels
	2. Meets recommended Case Management close-out criteria
✓	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
		1. Receives Medicaid reimbursement for Case Management
✓	✓	2. Has specific case close-out criteria
✓	✓	3. Includes dust wipe testing as a routine part of Environmental Investigations
✓	✓	4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. Program is using information from *Another Link in the Chain* to try to get specific funding for case management services from Medicaid. Currently Medicaid reimburses for “child coordination services” that are not specific for lead.
2. Program is trying to increase the rate of Medicaid reimbursement for environmental investigations. Currently they receive \$438 per case, which is an increase of \$103 since the fall of 1998.

NORTH DAKOTA

CDC Grantee: No

Predictors of Risk for CLP: 74,038 Pre-50 Housing Units, 25.6 % Pre-1950 Housing

Initiates Case Management at 10 µg/dL.

Initiates Environmental Investigations at 20 µg/dL.

	1997	1998
Number of Children identified with BLL \geq 20 µg/dL	1	3
Number of Environmental Investigations completed	Unknown	Unknown

	Key Indicators
	1. Requires laboratory reporting of ALL blood lead levels
	2. Meets recommended Case Management close-out criteria
	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
✓	✓	1. Receives Medicaid reimbursement for Case Management
	✓	2. Has specific case close-out criteria
		3. Includes dust wipe testing as a routine part of Environmental Investigations
✓	✓	4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. No information was provided on environmental investigation components or standards.
2. Medicaid reimburses for the nurses time during case management and environmental investigations.

OHIO

CDC Grantee: Yes/CLPPP

Predictors of Risk for CLP: 1,553,491 Pre-50 Housing Units, 32.5 % Pre-1950 Housing

Initiates Case Management at various levels depending upon the local health department.

Initiates Environmental Investigations at 15 µg/dL.

	1997	1998
Number of Children identified with BLL ≥20 µg/dL	1,056	1,657
Number of Environmental Investigations completed	Unknown	1,390

	Key Indicators
✓	1. Requires laboratory reporting of ALL blood lead levels
✓	2. Meets recommended Case Management close-out criteria
*	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
		1. Receives Medicaid reimbursement for Case Management
✓	✓	2. Has specific case close-out criteria
✓	✓	3. Includes dust wipe testing as a routine part of Environmental Investigations
✓	✓	4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. Program used *Another Link in the Chain* to develop a standardized case management protocol statewide and to negotiate for reimbursement from Medicaid for case management.
2. Program receives \$626 per case for environmental investigations. They can re-bill Medicaid after 6 months for the same amount if necessary. This rate has increased from \$490 per case.
3. * Program is currently cross-indexing their database with Medicaid.

OKLAHOMA

CDC Grantee: Yes/Surveillance

Predictors of Risk for CLP: 272,588 Pre-50 Housing Units, 18.0 % Pre-1950 Housing

Initiates Case Management at 20 µg/dL.

Initiates Environmental Investigations at 20 µg/dL.

	1997	1998
Number of Children identified with BLL ≥20 µg/dL	Unknown	14
Number of Environmental Investigations completed	Approx. 134	14

	Key Indicators
✓	1. Requires laboratory reporting of ALL blood lead levels
	2. Meets recommended Case Management close-out criteria
	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
		1. Receives Medicaid reimbursement for Case Management
✓	✓	2. Has specific case close-out criteria
✓	✓	3. Includes dust wipe testing as a routine part of Environmental Investigations
		4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments: None

CHAPTER 3: STATE PROGRESS REPORTS

OREGON

CDC Grantee: Yes/ Surveillance

Predictors of Risk for CLP: 325,049 Pre-50 Housing Units, 22.4 % Pre-1950 Housing

Initiates Case Management at 10 µg/dL.

Initiates Environmental Investigations at 20 µg/dL.

	1997	1998
Number of Children identified with BLL \geq 20 µg/dL	16	16
Number of Environmental Investigations completed	Approx. 13	12

	Key Indicators
	1. Requires laboratory reporting of ALL blood lead levels
	2. Meets recommended Case Management close-out criteria
✓	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
		1. Receives Medicaid reimbursement for Case Management
✓	✓	2. Has specific case close-out criteria
✓	✓	3. Includes dust wipe testing as a routine part of Environmental Investigations
		4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. Program tried to negotiate Medicaid funding for case management and environmental investigations and was told that money was not available.

PENNSYLVANIA

CDC Grantee: Yes/ CLPPP

Predictors of Risk for CLP: 2,279,059 Pre-50 Housing Units, 43.4 % Pre-1950 Housing

Initiates Case Management at 20 µg/dL and for persistent levels of 15 to 19 µg/dL.

Initiates Environmental Investigations at 20 µg/dL and for persistent levels of 15 to 19 µg/dL.

	1997	1998
Number of Children identified with BLL \geq 20 µg/dL	6,242	Approximately 1,880
Number of Environmental Investigations completed	Unknown	1,556

	Key Indicators
*	1. Requires laboratory reporting of ALL blood lead levels
✓	2. Meets recommended Case Management close-out criteria
	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
✓		1. Receives Medicaid reimbursement for Case Management
✓	✓	2. Has specific case close-out criteria
✓		3. Includes dust wipe testing as a routine part of Environmental Investigations
✓	✓	4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. * Proposed regulations published on 5/27/00, when promulgated, will require laboratories performing blood lead analysis to report all BLLs.
2. Program receives \$350 per initial environmental investigation.

RHODE ISLAND

CDC Grantee: Yes/ CLPPP

Predictors of Risk for CLP: 199,393 Pre-50 Housing Units, 45.3 % Pre-1950 Housing

Initiates Case Management at 20 µg/dL.

Initiates Environmental Investigations at 20 µg/dL.

	1997	1998
Number of Children identified with BLL \geq 20 µg/dL	431	185
Number of Environmental Investigations completed	Unknown	342

	Key Indicators
✓	1. Requires laboratory reporting of ALL blood lead levels
	2. Meets recommended Case Management close-out criteria
	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
✓	✓	1. Receives Medicaid reimbursement for Case Management
	✓	2. Has specific case close-out criteria
✓	✓	3. Includes dust wipe testing as a routine part of Environmental Investigations
✓	✓	4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. The CLPPP is not set up to receive reimbursement. However, a separate entity entitled the “Lead Center” bills for reimbursement.
2. The program has not used information from *Another Link in the Chain*. However, they are thinking about contacting other programs to try and establish better and more consistent case close-out criteria.

SOUTH CAROLINA

CDC Grantee: Yes/CLPPP

Predictors of Risk for CLP: 185,463 Pre-50 Housing Units, 10.6 % Pre-1950 Housing

Initiates Case Management at 15 µg/dL.

Initiates Environmental Investigations at 20 µg/dL.

	1997	1998
Number of Children identified with BLL \geq 20 µg/dL	250	30
Number of Environmental Investigations completed	Approx. 125	Unknown

	Key Indicators
	1. Requires laboratory reporting of ALL blood lead levels
	2. Meets recommended Case Management close-out criteria
✓	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
✓	✓	1. Receives Medicaid reimbursement for Case Management
✓	✓	2. Has specific case close-out criteria
✓	✓	3. Includes dust wipe testing as a routine part of Environmental Investigations
		4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. The program used *Another Link in the Chain* to encourage development of written protocols for environmental investigations and to attempt to obtain state funding for childhood lead poisoning prevention. The funding effort was not successful.
2. Family support services can bill Medicaid for case management reimbursement (but not the state program).

SOUTH DAKOTA

CDC Grantee: No

Predictors of Risk for CLP: 98,661 Pre-50 Housing Units, 30.5 % Pre-1950 Housing

Initiates Case Management at 20 µg/dL.

Initiates Environmental Investigations at 20 µg/dL.

	1997	1998
Number of Children identified with BLL \geq 20 µg/dL	Unknown	Unknown
Number of Environmental Investigations completed	Unknown	Unknown

	Key Indicators
	1. Requires laboratory reporting of ALL blood lead levels
	2. Meets recommended Case Management close-out criteria
	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
		1. Receives Medicaid reimbursement for Case Management
		2. Has specific case close-out criteria
		3. Includes dust wipe testing as a routine part of Environmental Investigations
		4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments: None

TENNESSEE

CDC Grantee: No

Predictors of Risk for CLP: 394,755 Pre-50 Housing Units, 16.2 % Pre-1950 Housing

Initiates Case Management at 10 µg/dL.

Initiates Environmental Investigations at 20 µg/dL and for repeated levels between 15 to 19 µg/dL.

	1997	1998
Number of Children identified with BLL \geq 20 µg/dL	259	91
Number of Environmental Investigations completed	366	378

	Key Indicators
	1. Requires laboratory reporting of ALL blood lead levels
	2. Meets recommended Case Management close-out criteria
	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
✓	✓	1. Receives Medicaid reimbursement for Case Management
✓	✓	2. Has specific case close-out criteria
	✓	3. Includes dust wipe testing as a routine part of Environmental Investigations
✓	✓	4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. The state has not had a formal program since June 30, 1998 due to lack of specific funding. (However, CDC funding was reinstated in July, 2001.)
2. There is legislation pending within the state that addresses training and certification requirements for HUD/EPA.

TEXAS

CDC Grantee: Yes/ Surveillance

Predictors of Risk for CLP: 899,703 Pre-50 Housing Units, 11.0 % Pre-1950 Housing

No state requirements for initiation of either case management or environmental investigation.

	1997	1998
Number of Children identified with BLL \geq 20 µg/dL	1,107	1,069
Number of Environmental Investigations completed	Unknown	Unknown

	Key Indicators
	1. Requires laboratory reporting of ALL blood lead levels
	2. Meets recommended Case Management close-out criteria
	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
✓	✓	1. Receives Medicaid reimbursement for Case Management
		2. Has specific case close-out criteria
✓		3. Includes dust wipe testing as a routine part of Environmental Investigations
		4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. The program is a surveillance program only and was unable to provide any information about case management and environmental investigations, which are done at the local level.

CHAPTER 3: STATE PROGRESS REPORTS

UTAH

CDC Grantee: Yes/CLPPP

Predictors of Risk for CLP: 120,755 Pre-50 Housing Units, 15.7 % Pre-1950 Housing

Initiates Case Management at 10 µg/dL.

Initiates Environmental Investigations at 20 µg/dL and for repeated levels of 15 to 19 µg/dL.

	1997	1998
Number of Children identified with BLL \geq 20 µg/dL	16	3
Number of Environmental Investigations completed	Unknown	3

	Key Indicators
	1. Requires laboratory reporting of ALL blood lead levels
	2. Meets recommended Case Management close-out criteria
	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
		1. Receives Medicaid reimbursement for Case Management
	✓	2. Has specific case close-out criteria
	✓	3. Includes dust wipe testing as a routine part of Environmental Investigations
		4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. In the past, the program was funded for surveillance. Now the program has CDC CLPPP funding and is trying to implement more prevention and education efforts.
2. The state does not require reporting of all BLLs, but indicates that the labs are reporting all levels.

VERMONT

CDC Grantee: Yes/CLPPP

Predictors of Risk for CLP: 106,737 Pre-50 Housing Units, 36.3 % Pre-1950 Housing

Initiates Case Management at 15 µg/dL.

Initiates Environmental Investigations at 20 µg/dL and for repeated levels 15 to 19 µg/dL.

	1997	1998
Number of Children identified with BLL \geq 20 µg/dL	42	29
Number of Environmental Investigations completed	35	29

	Key Indicators
✓	1. Requires laboratory reporting of ALL blood lead levels
	2. Meets recommended Case Management close-out criteria
✓	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
✓	✓	1. Receives Medicaid reimbursement for Case Management
✓	✓	2. Has specific case close-out criteria
✓	✓	3. Includes dust wipe testing as a routine part of Environmental Investigations
✓	✓	4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. Case management is reimbursed through cost reports. Reimbursement rate for environmental investigations is \$450 per case.
2. State requires identification of Medicaid status on all laboratory reports.

VIRGINIA

CDC Grantee: Yes/CLPPP

Predictors of Risk for CLP: 458,940 Pre-50 Housing Units, 15.8 % Pre-1950 Housing

Initiates Case Management at 10 µg/dL.

Initiates Environmental Investigations at 20 µg/dL and for repeated levels of 15 to 19 µg/dL.

	1997	1998
Number of Children identified with BLL ≥20 µg/dL	205	163
Number of Environmental Investigations completed	205	163

	Key Indicators
	1. Requires laboratory reporting of ALL blood lead levels
	2. Meets recommended Case Management close-out criteria
	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
		1. Receives Medicaid reimbursement for Case Management
✓	✓	2. Has specific case close-out criteria
✓	✓	3. Includes dust wipe testing as a routine part of Environmental Investigations
✓	✓	4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. The state program has sent copies of *Another Link in the Chain* to subgrantees to improve their protocols regarding follow-up and case management.
2. Pending state legislation would require lead screening prior to daycare admission and follow-up for lead poisoning.
3. The program receives \$150 per case per environmental investigation. Currently, they are trying to increase the amount of reimbursement.

WASHINGTON

CDC Grantee: Yes/ Surveillance

Predictors of Risk for CLP: 488,227 Pre-50 Housing Units, 19.9 % Pre-1950 Housing

Initiates Case Management at 10 µg/dL.

Initiates Environmental Investigations at 15 µg/dL.

	1997	1998
Number of Children identified with BLL \geq 20 µg/dL	16	11
Number of Environmental Investigations completed	Unknown	8

	Key Indicators
✓	1. Requires laboratory reporting of ALL blood lead levels
	2. Meets recommended Case Management close-out criteria
	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
		1. Receives Medicaid reimbursement for Case Management
✓	✓	2. Has specific case close-out criteria
✓	✓	3. Includes dust wipe testing as a routine part of Environmental Investigations
		4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. The program used *Another Link in the Chain* to help foster relationships with HUD, EPA, and the state Medicaid Administration.
2. If a RN determines the source of lead poisoning during a home visit, an environmental investigation is not done unless the family requests it.
3. Vacuum dust samples are done routinely for initial environmental investigations.

WEST VIRGINIA

CDC Grantee: Yes/ CLPPP

Predictors of Risk for CLP: 251,227 Pre-50 Housing Units, 29.7 % Pre-1950 Housing

Initiates Case Management at 15 µg/dL.

Initiates Environmental Investigations at 20 µg/dL and for repeated levels of 15 to 19 µg/dL, or at 15-19 µg/dL if the parents are concerned or the provider makes a request.

	1997	1998
Number of Children identified with BLL \geq 20 µg/dL	44	16
Number of Environmental Investigations completed	41	21

	Key Indicators
*	1. Requires laboratory reporting of ALL blood lead levels
✓	2. Meets recommended Case Management close-out criteria
	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
		1. Receives Medicaid reimbursement for Case Management
✓	✓	2. Has specific case close-out criteria
	✓	3. Includes dust wipe testing as a routine part of Environmental Investigations
✓	✓	4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. *There is no legislation pending within the state that would affect case management or environmental investigations. However, the program plans to present a request to change reporting laws to require reporting of all BLLs.
2. There has been no change in the rate of reimbursement for environmental investigations since the fall of 1998.

WISCONSIN

CDC Grantee: Yes/ CLPPP

Predictors of Risk for CLP: 725,489 Pre-50 Housing Units, 31.3 % Pre-1950 Housing

Initiates Case Management at 20 µg/dL, but many LHD also begin at 10 µg/dL.

Initiates Environmental Investigations at 20 µg/dL, or at lower levels if caseloads and resources of LHD's allow.

	1997	1998
Number of Children identified with BLL \geq 20 µg/dL	1,526	613
Number of Environmental Investigations completed	Approx 116	888

	Key Indicators
✓	1. Requires laboratory reporting of ALL blood lead levels
✓	2. Meets recommended Case Management close-out criteria
*	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
✓	✓	1. Receives Medicaid reimbursement for Case Management
✓	✓	2. Has specific case close-out criteria
✓	✓	3. Includes dust wipe testing as a routine part of Environmental Investigations
✓	✓	4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. Legislation was passed in April of 2000 that requires environmental investigations for all children with venous BLLs \geq 20 µg/dL and for children with two venous BLLs of 15-19 µg/dL that are at least 90 days apart. If hazards are found, the property must be brought to safe standards within a specified time period. Prior to this, state law did not require these activities.
2. * The program will be able to identify the number of lead poisoned children on Medicaid for the year 2000.
3. Starting January 1, 2001, environmental investigations will be required for two venous BLLs of 15-19 µg/dL that are three months apart.
4. Local health departments receive Medicaid reimbursement of \$ 25 for one nursing educational visit and \$27.78 per hour for targeted case management services. For environmental investigations, local health departments receive \$102 for an initial investigation and \$51 for one follow-up visit. Medicaid has requested an increase in the reimbursement rates starting July 1, 2001.

WYOMING

CDC Grantee: Yes/ CLPPP

Predictors of Risk for CLP: 46,458 Pre-50 Housing Units, 20.8 % Pre-1950 Housing

Initiates Case Management at 20 µg/dL.

Initiates Environmental Investigations at 15 µg/dL.

	1997	1998
Number of Children identified with BLL \geq 20 µg/dL	20	5
Number of Environmental Investigations completed	11	0

	Key Indicators
✓	1. Requires laboratory reporting of ALL blood lead levels
	2. Meets recommended Case Management close-out criteria
✓	3. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
	✓	1. Receives Medicaid reimbursement for Case Management
✓	✓	2. Has specific case close-out criteria
✓	✓	3. Includes dust wipe testing as a routine part of Environmental Investigations
	✓	4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. Medicaid reimbursement goes to providers, not the CLPPP program. The providers are eligible to receive \$70 for a one-time health education visit and \$100 for a one-time environmental investigation. However, most local county public health departments have not applied for reimbursement.

LOCAL PROGRESS REPORTS

BALTIMORE, MARYLAND

CDC Grantee: No – Receives CDC funds through state grant

Predictors of Risk for CLP: 181,652 Pre-50 Housing Units, 59.8% Pre-1950 Housing

373 Children identified with BLL > 20 µg/dL in 1998

140 Environmental Investigations completed in 1998

Initiates Case Management at 15 µg/dL.

Initiates Environmental Investigations at 15 µg/dL.

Key Indicators	
	1. Meets recommended Case Management close-out criteria
	2. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
		1. Receives Medicaid reimbursement for Case Management
✓	✓	2. Has specific case close-out criteria
✓	✓	3. Includes dust wipe testing as a routine part of Environmental Investigations
		4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. State legislation pending would increase the number of children being screened.

BOSTON, MASSACHUSETTS

CDC Grantee: Yes

Predictors of Risk for CLP: 168,752 Pre-50 Housing Units, 67.3% Pre-1950 Housing

179 Children identified with BLL > 20 µg/dL in 1998

Unknown number of Environmental Investigations completed in 1998

Initiates Case Management at 15 µg/dL.

Initiates Environmental Investigations at 15 µg/dL.

Key Indicators	
	1. Meets recommended Case Management close-out criteria
	2. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
		1. Receives Medicaid reimbursement for Case Management
	✓	2. Has specific case close-out criteria
		3. Includes dust wipe testing as a routine part of Environmental Investigations
		4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments: None

BUTTE, MONTANA

CDC Grantee: No

Predictors of Risk for CLP: Pre-50 Housing Units, % Pre-1950 Housing

6 Children identified with BLL > 20 µg/dL in 1998

16 Environmental Investigations completed in 1998

Initiates Case Management at 10 µg/dL.

Initiates Environmental Investigations at 20 µg/dL.

Key Indicators	
	1. Meets recommended Case Management close-out criteria
	2. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
*		1. Receives Medicaid reimbursement for Case Management
*	✓	2. Has specific case close-out criteria
*	✓	3. Includes dust wipe testing as a routine part of Environmental Investigations
*		4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

- * Program was not included in the original *Another Link in the Chain* survey.

CHICAGO, ILLINOIS

CDC Grantee: No – Receives funds through state grant

Predictors of Risk for CLP: 663,610 Pre-50 Housing Units, 58.6% Pre-1950 Housing

3,359 Children identified with BLL > 20 µg/dL in 1998

4,077 Environmental Investigations completed in 1998

Initiates Case Management at 15 µg/dL.

Initiates Environmental Investigations at 20 µg/dL and for two repeated levels of 15-19 µg/dL within six months if the child is between 0 and 12 months old.

Key Indicators	
	1. Meets recommended Case Management close-out criteria
	2. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
		1. Receives Medicaid reimbursement for Case Management
	✓	2. Has specific case close-out criteria
	✓	3. Includes dust wipe testing as a routine part of Environmental Investigations
✓	✓	4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

- Program used *Another Link in the Chain* to educate and advocate for changes in Medicaid reimbursement rates.
- Program receives \$43.50 per initial environmental investigation from Medicaid.

DETROIT, MICHIGAN

CDC Grantee: Yes

Predictors of Risk for CLP: 257,260 Pre-50 Housing Units, 62.7% Pre-1950 Housing

599 Children identified with BLL > 20 µg/dL in 1998

417 Environmental Investigations completed in 1998

Initiates Case Management at 20 µg/dL.

Initiates Environmental Investigations at 20 µg/dL.

Key Indicators	
	1. Meets recommended Case Management close-out criteria
	2. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
✓	✓	1. Receives Medicaid reimbursement for Case Management
✓	✓	2. Has specific case close-out criteria
	✓	3. Includes dust wipe testing as a routine part of Environmental Investigations
✓	✓	4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. Case management protocols are being developed using the standards described in *Another Link in the Chain*.
2. Medicaid reimburses \$69.31 per initial case management visit. However, the program has not yet received funds. Medicaid reimburses \$100 for an initial environmental investigation and \$75 for a follow-up investigation.

DUVAL COUNTY, FLORIDA

CDC Grantee: Yes

Predictors of Risk for CLP: 44,740 Pre-50 Housing Units, 15.7 %Pre-1950 Housing

6 Children identified with BLL > 20 µg/dL in 1998

73 Environmental Investigations completed in 1998

Initiates Case Management at 10 µg/dL.

Initiates Environmental Investigations at 15 µg/dL.

Key Indicators	
	1. Meets recommended Case Management close-out criteria
	2. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
	✓	1. Receives Medicaid reimbursement for Case Management
	✓	2. Has specific case close-out criteria
✓	✓	3. Includes dust wipe testing as a routine part of Environmental Investigations
✓		4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. Program used *Another Link in the Chain* to encourage Medicaid to report information and to provide reimbursement on a case-by-case basis.
2. Case management reimbursement is included in the cost of care, but the program never receives the money.

HARRIS COUNTY, TEXAS

CDC Grantee: Yes

Predictors of Risk for CLP: 127,968 Pre-50 Housing Units, 10.9% Pre-1950 Housing

Unknown number of Children identified with BLL > 20 µg/dL in 1998

Unknown number of Environmental Investigations completed in 1998

Initiates Case Management at 10 µg/dL.

Initiates Environmental Investigations at 10 µg/dL.

	Key Indicators
	1. Meets recommended Case Management close-out criteria
✓	2. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
✓	✓	1. Receives Medicaid reimbursement for Case Management
✓	✓	2. Has specific case close-out criteria
✓	✓	3. Includes dust wipe testing as a routine part of Environmental Investigations
		4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. Medicaid reimburses \$54 per initial case management visit and \$16 per follow-up visit (6 follow-up visits permitted).
2. Program was not operational until 1999. In 1999, 116 new cases of lead poisoned children were identified and 57 environmental investigations were completed.

JEFFERSON COUNTY, KENTUCKY

CDC Grantee: Yes

Predictors of Risk for CLP: 82,734 Pre-50 Housing Units, 29.3 % Pre-1950 Housing

65 Children identified with BLL > 20 µg/dL in 1998

327 Environmental Investigations completed in 1998

Initiates Case Management at 15 µg/dL.

Initiates Environmental Investigations at 20 µg/dL.

	Key Indicators
✓	1. Meets recommended Case Management close-out criteria
	2. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
*	✓	1. Receives Medicaid reimbursement for Case Management
*	✓	2. Has specific case close-out criteria
*		3. Includes dust wipe testing as a routine part of Environmental Investigations
*	✓	4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. Successfully negotiated reimbursement for the initial case management visit (\$269) from the local Medicaid managed care plan. Receives \$220 for initial environmental investigations.
2. * Program was not included in the original *Another Link in the Chain* survey.

LOS ANGELES COUNTY, CALIFORNIA

CDC Grantee: Yes

Predictors of Risk for CLP: 863,475 Pre-50 Housing Units, 27.3% Pre-1950 Housing
257 Children identified with BLL > 20 µg/dL in 1998

Unknown number of Environmental Investigations completed in 1998

Initiates Case Management at 20 µg/dL and for repeated levels of 15 to 19 µg/dL.

Initiates Environmental Investigations at 20 µg/dL and for repeated levels of 15 to 19 µg/dL.

	Key Indicators
✓	1. Meets recommended Case Management close-out criteria
	2. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
✓	✓	1. Receives Medicaid reimbursement for Case Management
✓	✓	2. Has specific case close-out criteria
✓	✓	3. Includes dust wipe testing as a routine part of Environmental Investigations
✓	✓	4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. Pending state legislation would require reporting of all BLLs. Currently only levels of 25 µg/dL and above must be reported.

MARION COUNTY, INDIANA

CDC Grantee: Yes

Predictors of Risk for CLP: 101,981 Pre-50 Housing Units, 29.2% Pre-1950 Housing
41 Children identified with BLL > 20 µg/dL in 1998

159 Environmental Investigations completed in 1998

Initiates Case Management at 15 µg/dL.

Initiates Environmental Investigations at 15 µg/dL.

	Key Indicators
	1. Meets recommended Case Management close-out criteria
✓	2. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
		1. Receives Medicaid reimbursement for Case Management
	✓	2. Has specific case close-out criteria
✓	✓	3. Includes dust wipe testing as a routine part of Environmental Investigations
		4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. Program used *Another Link in the Chain* to:
 - a) talk with Medicaid and state officials about reimbursement for case management and environmental investigations;
 - b) increase awareness; and
 - c) recommend mandatory reporting.

MEMPHIS-SHELBY COUNTY, TENNESSEE

CDC Grantee: Yes

Predictors of Risk for CLP: 60,633 Pre-50 Housing Units, 18.5 % Pre-1950 Housing

103 Children identified with BLL > 20 µg/dL in 1998

315 Environmental Investigations completed in 1998

Initiates Case Management at 10 µg/dL.

Initiates Environmental Investigations at 20 µg/dL and for repeated levels of 15-19 µg/dL and for levels of 10 µg/dL and above if there are multiple children at the same address.

	Key Indicators
	1. Meets recommended Case Management close-out criteria
✓	2. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
*	✓	1. Receives Medicaid reimbursement for Case Management
*	✓	2. Has specific case close-out criteria
*	✓	3. Includes dust wipe testing as a routine part of Environmental Investigations
*	✓	4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. Program is set up to receive Medicaid reimbursement for case management but has not yet received the funds.
2. * Program was not included in the original *Another Link in the Chain* survey.
3. Medicaid reimburses \$128.88 for an initial environmental investigation.
4. Program has used information from *Another Link in the Chain* to get the attention of administration and to try to create policy to make changes.

MIAMI-DADE COUNTY, FLORIDA

CDC Grantee: Yes

Predictors of Risk for CLP: 95,153 Pre-50 Housing Units, 12.3 % Pre-1950 Housing

45 Children identified with BLL > 20 µg/dL in 1998

50 Environmental Investigations completed in 1998

Initiates Case Management at 10 µg/dL.

Initiates Environmental Investigations at 20 µg/dL.

	Key Indicators
	1. Meets recommended Case Management close-out criteria
	2. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
*		1. Receives Medicaid reimbursement for Case Management
*	✓	2. Has specific case close-out criteria
*	✓	3. Includes dust wipe testing as a routine part of Environmental Investigations
*		4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. Program used *Another Link in the Chain* to examine the level of Medicaid reimbursement by other programs.
2. * Program was not included in the original *Another Link in the Chain* survey.

CHAPTER 3: LOCAL PROGRESS REPORTS

MILWAUKEE, WISCONSIN

CDC Grantee: No – Receives funding through state grant

Predictors of Risk for CLP: 128,886 Pre-50 Housing Units, 50.7% Pre-1950 Housing

621 Children identified with BLL > 20 µg/dL in 1998

530 Environmental Investigations completed in 1998

Initiates Case Management at 15 µg/dL.

Initiates Environmental Investigations at 20 µg/dL.

	Key Indicators
✓	1. Meets recommended Case Management close-out criteria
	2. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
✓	✓	1. Receives Medicaid reimbursement for Case Management
	✓	2. Has specific case close-out criteria
✓		3. Includes dust wipe testing as a routine part of Environmental Investigations
✓	✓	4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. Program changed to a team model for case management and used information from *Another Link in the Chain* to support this change.
2. State Bill 806 provides immunity from civil liability for environmental investigations and case management.
3. Medicaid reimburses for case management at the rate of \$25 for a one-time educational visit. In addition, as of summer 2000, reimbursement has been available for targeted case management covering the assessment, careplan, and follow-up at the rate of \$35.55/hr reimbursable at 60% (\$21.33/hour). However, the money reimbursed by Medicaid goes to the city's General Fund. For environmental investigations, Medicaid reimburses \$100 per initial investigation and \$50 when the abatement is complete.

NEW YORK CITY, NEW YORK

CDC Grantee: Yes

Predictors of Risk for CLP: 1,655,469 Pre-50 Housing Units, 55.3% Pre-1950 Housing

1,062 Children identified with BLL > 20 µg/dL in 1998

2,885 Environmental Investigations completed in 1998

Initiates Case Management at 20 µg/dL and for repeated levels of 15 to 19 µg/dL.

Initiates Environmental Investigations at 20 µg/dL and for repeated levels of 15 to 19 µg/dL.

	Key Indicators
✓	1. Meets recommended Case Management close-out criteria
	2. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
		1. Receives Medicaid reimbursement for Case Management
✓	✓	2. Has specific case close-out criteria
		3. Includes dust wipe testing as a routine part of Environmental Investigations
		4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments: None

PHILADELPHIA, PENNSYLVANIA

CDC Grantee: No – Receives CDC funds through state grant

Predictors of Risk for CLP: Pre-50 Housing Units, % Pre-1950 Housing

1,236 Children identified with BLL > 20 µg/dL in 1998

851 Environmental Investigations completed in 1998

Initiates Case Management at 20 µg/dL and for repeated levels of 15 to 19 µg/dL.

Initiates Environmental Investigations at 20 µg/dL and for repeated levels of 15 to 19 µg/dL.

	Key Indicators
✓	1. Meets recommended Case Management close-out criteria
	2. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
✓		1. Receives Medicaid reimbursement for Case Management
	✓	2. Has specific case close-out criteria
		3. Includes dust wipe testing as a routine part of Environmental Investigations
✓	✓	4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments: None

PINELLAS COUNTY, FLORIDA

CDC Grantee: Yes

Predictors of Risk for CLP: 41,590 Pre-50 Housing Units, 9.1% Pre-1950 Housing

11 Children identified with BLL > 20 µg/dL in 1998

48 Environmental Investigations completed in 1998

Initiates Case Management at 10 µg/dL.

Initiates Environmental Investigations at 20 µg/dL and for repeated levels of 15 to 19 µg/dL and at 10 µg/dL if a child is less than 12 months old.

	Key Indicators
✓	1. Meets recommended Case Management close-out criteria
	2. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
		1. Receives Medicaid reimbursement for Case Management
	✓	2. Has specific case close-out criteria
✓		3. Includes dust wipe testing as a routine part of Environmental Investigations
✓		4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. Program used *Another Link in the Chain* to develop outcome measures for key components, revise their protocol, and establish case close-out guidelines.
2. Dust wipe testing is sometimes done for assessment purposes, but not routinely.

SALT LAKE CITY, UTAH

CDC Grantee: Yes

Predictors of Risk for CLP: 36,180 Pre-50 Housing Units, 49.0% Pre-1950 Housing

2 Children identified with BLL > 20 µg/dL in 1998

1 Environmental Investigation completed in 1998

Initiates Case Management at 10 µg/dL.

Initiates Environmental Investigations at 20 µg/dL.

	Key Indicators
	1. Meets recommended Case Management close-out criteria
	2. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
		1. Receives Medicaid reimbursement for Case Management
	✓	2. Has specific case close-out criteria
✓	✓	3. Includes dust wipe testing as a routine part of Environmental Investigations
		4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments: None

SAN DIEGO, CALIFORNIA

CDC Grantee: Yes

Predictors of Risk for CLP: 108,659 Pre-50 Housing Units, 11.5% Pre-1950 Housing

34 Children identified with BLL > 20 µg/dL in 1998

34 Environmental Investigations completed in 1998

Initiates Case Management at 15 µg/dL.

Initiates Environmental Investigations at 15 µg/dL.

	Key Indicators
	1. Meets recommended Case Management close-out criteria
✓	2. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
✓	✓	1. Receives Medicaid reimbursement for Case Management
	✓	2. Has specific case close-out criteria
✓	✓	3. Includes dust wipe testing as a routine part of Environmental Investigations
✓	✓	4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. Program receives \$275 per initial visit for case management. Only one visit is allowed per case unless the child moves to a new residence. The rate of reimbursement for environmental investigation is \$270 per initial investigation.

WESTCHESTER COUNTY, NEW YORK

CDC Grantee: Yes

Predictors of Risk for CLP: 154,571 Pre-50 Housing Units, 45.9% Pre-1950 Housing

86 Children identified with BLL > 20 µg/dL in 1998

Approximately 77 Environmental Investigations completed in 1998

Initiates Case Management at 20 µg/dL.

Initiates Environmental Investigations at 20 µg/dL.

	Key Indicators
	1. Meets recommended Case Management close-out criteria
✓	2. Able to identify the number of children on Medicaid

1998	2000	Key Indicators
✓	✓	1. Receives Medicaid reimbursement for Case Management
✓	✓	2. Has specific case close-out criteria
✓		3. Includes dust wipe testing as a routine part of Environmental Investigations
		4. Receives Medicaid reimbursement for Environmental Investigations

Additional Comments:

1. Medicaid reimburses \$750 per case for 29 months of case management.

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