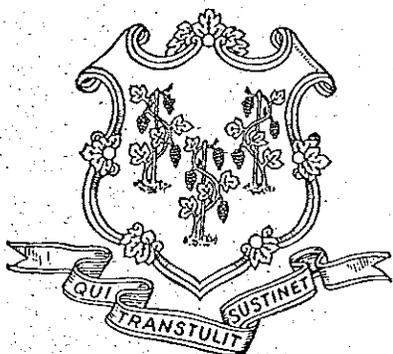


# **RESIDENTIAL LEAD ABATEMENT**

Connecticut  
General Assembly



LEGISLATIVE  
PROGRAM REVIEW  
AND  
INVESTIGATIONS  
COMMITTEE

**December 1999**

**CONNECTICUT GENERAL ASSEMBLY  
LEGISLATIVE PROGRAM REVIEW AND INVESTIGATIONS COMMITTEE**

The Legislative Program Review and Investigations Committee is a joint, bipartisan, statutory committee of the Connecticut General Assembly. It was established in 1972 to evaluate the efficiency, effectiveness, and statutory compliance of selected state agencies and programs, recommending remedies where needed. In 1975, the General Assembly expanded the committee's function to include investigations, and during the 1977 session added responsibility for "sunset" (automatic program termination) performance reviews. The committee was given authority to raise and report bills in 1985.

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LEGISLATIVE PROGRAM REVIEW  
& INVESTIGATIONS COMMITTEE

**Residential Lead Abatement**

DECEMBER 1999

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## Key Points

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### RESIDENTIAL LEAD ABATEMENT

- Lead is highly toxic and is considered a serious environmental health threat to children under the age of six.
  - Blood lead levels (BLLs) are used to measure the presence of lead in the body. The Centers for Disease Control issues guidelines that recommend various treatment actions be taken at specified blood lead levels equal to or greater than 10 mcg/dL.
  - Under Connecticut law, property owners are liable for abatement of defective interior and exterior surfaces that contain toxic levels of lead and are in a residential dwelling where children under the age of six reside, and if a child has a BLL of 20 mcg/dL or greater, stricter abatement requirements are mandated.
  - Of the children screened for elevated BLLs in Connecticut, 2,522 (4.6 percent) had a BLL equal to or greater than 10 mcg/dL, and of those, 598 children's BLLs were equal to or greater than 20 mcg/dL.
  - The major focus of Connecticut's lead program is on identifying children who are already lead-poisoned, inspecting their residences, and if lead hazards are found, requiring property owners to abate any lead considered harmful to the child.
  - The state has spent about \$11.5 million dollars and only 722 units have completed lead abatement. The average cost of abating lead in a unit is greater than \$15,000.
  - This focus has not been particularly successful in Connecticut -- during FY 98, a total of 275 abatements were completed, and approximately 1,200 abatement orders remained outstanding throughout the year.
  - The cornerstone of the childhood lead program should be the prevention of lead poisoning.
  - The state needs to identify high-risk geographic areas or populations and develop a targeted lead screening program.
  - A tax credit program for property owners who implement essential maintenance practices for risk reduction of lead-based paint hazards is a relatively inexpensive way to encourage rental property owners to manage or remove lead in their rental units.
  - Strong and clear regulatory action is necessary when prevention efforts are unsuccessful and a child has a high blood lead level.
  - A successful regulatory program must be supported by a comprehensive database. The department's information systems are fragmented and contain too many discrepancies to support adequate program management.
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# Executive Summary

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## RESIDENTIAL LEAD ABATEMENT

The harmful effects of lead hazards on children have been recognized for many years. Since lead was banned in paint, gasoline, and food cans in the late 1970s, legislation at both the federal and state level has been aimed at pre-1978 housing as the major cause of lead poisoning among children. Childhood exposure to lead usually occurs in two ways:

- deteriorated paint (and resulting dust) in poorly maintained housing; and
- repainting and remodeling projects that disturb leaded paint without appropriate safeguards to control, contain, and clean up lead dust.

All homes built prior to 1978 are considered to be potential sources of exposure to lead-based paint, however housing built before 1950 generally contains the highest amount of lead-based paint, since paint used at that time had a high lead content. In Connecticut, 35 percent of the state's total housing units were built prior to 1950.

The Legislative Program Review and Investigations Committee voted to conduct a study of Residential Lead Abatement in March 1999. The study examined Connecticut's law, regulations, and programs for screening children for elevated blood lead levels, as well as programs that provide financial assistance to property owners to abate hazardous lead from their properties.

Under Connecticut law, property owners are liable for abatement of defective interior and exterior surfaces that contains toxic levels of lead and are in a residential dwelling where children under the age of six reside. The regulations do not require a child be diagnosed with an elevated blood lead level in order for them to be applicable. However, if a child has been identified with an elevated blood lead level, more extensive abatement of lead hazards is mandated.

The Connecticut Department of Public Health operates the Childhood Lead Poisoning Prevention Program, which oversees prevention and regulatory activities. The Department of Economic and Community Development administers federal and state financial programs that provide loans and grants to property owners for lead abatement activities. At the local level, 108 health departments/districts are responsible for conducting epidemiological investigations once a child is identified with a blood lead level of 20 micrograms (mcg) per deciliter (dL) of blood or greater. In addition, the local code enforcement agencies conduct environmental inspections, issue abatement orders to property owners if lead hazards are present, and ensure compliance with the order through re-inspection or referral to the courts.

Connecticut currently recommends, but does not mandate, all children between the ages of one and six be screened for lead poisoning. Studies based on national data have shown the risk for lead exposure remains disproportionately high for some groups. Age, income level,

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race/ethnicity, and age of housing are key factors in determining children's risk for lead poisoning.

The Department of Public Health recommends universal lead screening tests be performed on all children under the age of six. But screening data shows that only 20 percent had a valid screen for lead poisoning during 1998. Of those, 4.6 percent had blood lead levels equal to or greater than 10 mcg/dL (and 1.1 percent at or above 20 mcg/dL ). Further, the vast majority of children with high blood lead levels are concentrated in five of Connecticut's largest cities. Bridgeport, Hartford, New Haven, Stamford, and Waterbury accounted for 72 percent of children statewide with blood lead levels equal to or greater than 10 mcg/dL and 76 percent with levels at or more than 20 mcg/dL. These cities, have the greatest number of children younger than age six, high poverty rates, and a large portion of their housing stock was built prior to 1950.

By statute, local health departments/districts are required to submit lead inspection and abatement activity to the Department of Public Health. However, the committee found problems with the way these inspection data are tracked, with numbers carried over from year to year. The committee also found a low percentage of abatement orders are actually completed. There were 1,200 orders outstanding throughout 1998, and only 275 were completed (23 percent)

As would be expected, given the geographic location of children with elevated blood lead levels, the greatest inspection and abatement activity is reported by six of the states largest local health departments (Bridgeport, Hartford, New Britain, New Haven, Norwalk, and Waterbury). The six departments carried out 829 inspections (92 percent of the 903 total statewide inspections). Finally, 228 abatements (83 percent of statewide total) were reported completed.

The Connecticut General Assembly created the Hazardous Materials Program in 1987. The program is administered by DECD and operates as a consumer-oriented loan/grant program for property owners who have been issued orders by local health departments to abate lead or remove asbestos from residential dwelling units. As of June 30, 1999, lead had been abated from 722 residential housing units with total costs of \$11,231,547, and an average cost-per-unit of \$15,556. An additional \$2.5 million in state funding was allocated to the program in June 1999.

The committee found the major emphasis of Connecticut's lead program is on identifying children who have high blood lead levels, requiring local health departments inspect the child's residence and, if lead hazards are found, order the property owner to abate the lead. The effect of this focus is that thousands of property owners face considerable financial risk if a child under the age of six has a blood lead level that requires an environmental inspection of the residential unit. This policy has not been particularly successful in Connecticut, especially when the high number of lead abatement orders issued to property owners are compared to the low number of actual abatements occurring.

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The committee believes the cornerstone of the state's policy should be the prevention of lead poisoning and recommended a number of strategies for increasing prevention activities so fewer children will be exposed to lead hazards. These include:

- more widely distribute educational information on how to minimize or avoid exposure to lead hazards;
- establish a targeted lead screening program so children most at risk for elevated blood lead levels are identified early, provided with educational information, and interventions can be taken; and
- establish voluntary essential maintenance practice guidelines for rental properties to control and eliminate lead hazards, and provide tax credits for property owners that implement the guidelines.

The committee found the department's information systems are fragmented and contain too many discrepancies to support adequate program management. A successful regulatory program must be supported by a comprehensive database. To accomplish this, the committee recommended the department establish a single database for the program. The committee also found the Department of Public Health needs to coordinate its information systems and ensure the validity of the data. The department must also strengthen its oversight of local health departments' enforcement of abatement orders and ensure epidemiological investigations to identify lead sources are being performed.

A major policy issue at both the federal and state level is how to protect children from lead hazards. Although increasing prevention should reduce the number of children with elevated blood lead levels, the committee found strong and clear regulatory action is still needed when prevention efforts are unsuccessful and a child has a high blood lead level. Local health departments must have the authority to order property owners to manage and abate lead hazards to ensure children under the age of six are protected from continued exposure.

The department began a revision of its lead regulations in 1996. Achieving consensus has been difficult, and the new regulations have yet to be adopted. The program review committee believes several regulatory changes are necessary to more clearly define the program. These changes, however, must be undertaken in conjunction with improvements in data collection and analysis, as recommended above.

## **Recommendations**

- 1. The Department of Public Health establish an Internet web site providing online access to its Childhood Lead Poisoning Prevention Program. At a minimum, the web site should contain Connecticut's lead laws and regulations, general information about*

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*ways to protect children from lead hazards, information on financial assistance programs available to property owners to manage and/or abate lead hazards, statistics on screening and incidence rates, and how to request further information. In addition, the department could use the site to gather information on the impact of lead poisoning on the citizens of the state.*

2. *C.G.S. §19a-110(d) be amended to require local health departments or districts that receive a report of a child under the age of six with a blood lead level equal to or greater than 10 mcg/dL to provide the owner(s) of the property with educational materials on how to reduce lead hazards in housing. The Department of Public Health shall develop and furnish the educational materials to be provided.*
3. *The commissioner of public health define in regulation the terms "elevated blood lead level" and "lead-poisoning," in conjunction with recognized professional medical groups and the Centers for Disease Control, and the responses required in accordance with guidelines issued by the Centers for Disease Control.*

*C.G.S. §19a-111 shall be amended to require an epidemiological investigation for a confirmed concentration of lead in whole blood equal to or greater than 20 mcg/dL for a single test or 15-19 mcg/dL on two tests taken at least three months apart.*

4. *The Department of Public Health adopt CDC's interim policy recommendation until the department establishes a permanent statewide health plan for lead screening. DPH shall follow the steps recommended by CDC to develop the state plan. The plan shall include:*

- data demonstrating the appropriateness of dividing the state into targeted screening areas;*
- recommendations for screening by geographic area;*
- dissemination of screening recommendations for each area; and*
- a program evaluation component.*

*A draft plan shall be submitted to the Public Health Committee for comment by January 1, 2001, and a final plan shall be adopted by June 1, 2001. The plan shall be updated biennially and revised every five years, based on the latest screening data.*

*In addition, for both the interim plan and subsequent plans, DPH shall calculate screening, incidence, and prevalence rates based on municipal birth rates for the year rather than census data.*

5. *As authorized under C.G.S. §19a-26, the commissioner of public health shall establish a schedule of fees for lead screening analysis performed by the state laboratory. DPH shall seek reimbursement for services performed by the state laboratory from Medicaid,*

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*HUSKY, and private health insurers for lead screenings and diagnostic evaluations for lead poisoning for children under six years of age including, but not limited to, confirmatory blood lead testing. The state laboratory shall seek reimbursement beginning no later than October 1, 2001. Beginning no later than October 2, 2001, the state Department of Social Services shall pay for lead screenings and diagnostic evaluation services where a child under the age of six is eligible for medical assistance under the HUSKY plan. The Department of Public Health shall pay for lead screening and diagnostic evaluations for lead poisoning where the child is not covered by any health insurance.*

6. *The commissioner of public health develop voluntary guidelines establishing essential maintenance practices in pre-1978 housing for risk reduction of lead-based paint hazards that contain toxic levels of lead as defined in §19a-111-1 (59) (A) and (B) of the Lead Poisoning Prevention and Control Regulations. In addition, the state shall initiate a tax credit program to support essential maintenance practices as well as lead abatement. The tax program – beginning in 2001 for the tax year 2001 – shall provide a tax credit on payment of state income tax to:*

- owners of rental properties built prior to 1978 who provide written certification from a lead inspector, certified pursuant to C.G.S. §20-475 or C.G.S. §20-476, that the property is safe from lead hazards; and*
- owners of rental properties who have abated lead in pre-1978 rental properties, have received a certificate of clearance from a certified lead inspector, and have not received public financial assistance for the abatement. To receive the certificate, the level of lead dust cannot exceed the levels defined in §19a-111-4(e)(2) of the Connecticut Lead Poisoning Prevention and Control Regulations.*

*Only residential structures with six or fewer dwelling units will be eligible for the credit. The amount of the tax credit shall be \$1,500 annually per building, up to a maximum of six buildings. Written certifications shall be submitted with the state income tax filing. Tax credits shall be on the payment of state income tax. If no state income tax is owed by the property owner, he or she shall not be eligible for a tax credit. Written certification shall be valid for a period of two years, at which time the rental property owner would be eligible to recertify.*

7. *The Department of Economic and Community Development shall amend the state Hazardous Materials Program regulations to give funding priority to rental property owners who are under a lead order and have a valid certificate from a lead inspector certified under C.G.S. §20-475 or C.G.S. §20-476 that they have met the Essential Maintenance Practices guidelines.*

8. *The Department of Social Services explore the feasibility of extending Medicaid reimbursement for lead prevention services not currently covered and report its findings by October 1, 2000, to the public health, human services, and appropriations committees.*
9. *The Department of Public Health establish a single database for its Childhood Lead Poisoning Prevention Program. The database shall have the capability of integrating case-specific screening, case management, and environmental data.*
10. *C.G.S. §19a-111 be amended to require local health departments to use a form prescribed by the Department of Public Health for epidemiological investigations. The department shall distribute the form and collect the necessary information from local health departments concerning epidemiological investigations on its web site. The department shall evaluate the results of the investigations conducted and report the results of the evaluation to the Public Health Committee by January 31, 2001.*
11. *C.G.S. §19a-111b(3) be modified and section 19a-111c-3(3)(d) of the proposed regulations be clarified that reporting requirements do not apply when property owners privately hire a lead inspector to inspect their property for lead-based paint or soil.*
12. *Section 19a-111c-2(d)(4) of the proposed regulations should be deleted and the following language be substituted: "Chewable surfaces are required to be treated only if there is evidence that a child less than six years of age has chewed on the painted surface or there is paint abrasion or damage."*

## RESIDENTIAL LEAD ABATEMENT

The Legislative Program Review and Investigations Committee voted to undertake a study of "Residential Lead Abatement" in March 1999. The study focus was Connecticut's laws, regulations, and programs designed to reduce elevated blood lead levels in children and financially assist property owners in abating lead. Under Connecticut law, property owners are liable for abatement of toxic levels of lead-based paint (LBP) if a child under the age of six resides in the home. In addition, if a child has been identified with an elevated blood lead level (BLL) of 20 micrograms per deciliter of blood (mcg/dL) or greater, stricter requirements ensue.

As lead-based paint ages it can peel, chip or chalk, and form lead dust. Ingestion of lead dust is a primary source of lead poisoning in children under six years old and is considered a common pediatric problem. Blood lead levels are used to detect the presence of lead and even low levels are associated with decreased intelligence, reduction in attention span, reading and learning disabilities, and behavioral problems. In 1998, the state Department of Public Health (DPH) identified 598 children under the age of six with blood lead levels equal to or greater than 20 mcg/dL, the BLL which triggers an epidemiological investigation, including an inspection of the child's residence, be conducted by local code enforcement officials.

Several levels of government are involved in funding and/or administering lead prevention and/or abatement programs. At the federal level, the Department of Housing and Urban Development (HUD), the U.S. Department of Health and Human Services, through the Centers for Disease Prevention and Control (CDC), as well as the Department of Labor (DOL) and the Environmental Protection Agency (EPA) all have a role in implementing laws and regulations related to lead poisoning prevention. At the state level, the Department of Public Health operates the Childhood Lead Poisoning Prevention Program which oversees prevention, lead inspection, and abatement activities. In addition, the Department of Economic and Community Development (DECD) administers a variety of grant programs that can be used by small property owners for lead abatement activities. Finally, municipalities are responsible for conducting epidemiological investigations which include inspections of residences, issuing clean-up orders, and ensuring compliance through re-inspection.

**Report methodology.** A variety of research methods were used in conducting the lead abatement study. The general literature on lead poisoning prevention was reviewed. Federal and state statutes, regulations, guidelines, and budget documents were also examined. In addition, reports issued on the

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program by the administering agencies, as well as statistical and abatement cost data were analyzed. Extensive interviews were held with individuals in the Department of Public Health, the Department of Economic and Community Development, child advocates, and representatives of a rental property owners association. The program review committee also held a public hearing to gather additional testimony from interested parties.

**Report organization.** This report contains six chapters. Chapter One describes common risk factors for lead exposure, CDC guidelines for screening and treating children for lead poisoning, and national and state statistics on lead screening. Chapter Two summarizes federal law, regulations, and guidelines and identifies the role of the various federal agencies involved in lead prevention activities. Chapter Three describes Connecticut's lead laws and regulations. The next chapter reviews the major activities of the Department of Public Health and the Department of Economic Development, the two state agencies involved in overseeing and funding lead prevention activities. Chapter Five contains the committee's findings and recommendations. The last chapter compares childhood lead programs in selected other states with Connecticut's lead program.

### **Agency Response**

It is the policy of the Legislative Program Review and Investigations Committee to provide state agencies subject to a study with an opportunity to review and comment on the recommendations prior to publication of the final report. The response from the Department of Public Health is contained in Appendix A.

## Overview

**Introduction.** Lead is highly toxic and is considered a serious environmental health threat to children. The most common sources of lead poisoning exposure for children are lead-based paint that has deteriorated into paint chips and lead dust, and soil contaminated with lead. Lead dust settles quickly, is difficult to clean up, and can be invisible to the naked eye. Young children are often poisoned through normal hand-to-mouth activity after they get lead dust on their hands and toys.

The sale of lead-based paint for residential use was banned in 1978. Less common sources of exposure include lead gasoline (which was banned in 1978), lead in household pipes, food cans (banned in the U.S. in 1995), imported ceramics and miniblinds, and some traditional folk remedies. In addition, parents who work in certain high-risk occupations may bring lead dust into the home.

Lead serves no purpose in the human body. Lead poisoning occurs because the body cannot distinguish between lead and calcium, which is a mineral that strengthens bones. When lead is absorbed into the body it remains in the bloodstream for several weeks before it is absorbed into the bones, where it can collect over a lifetime. Exposure to lead hazards is especially dangerous for children under the age of six because their brains and nervous systems are still developing, and, therefore, are particularly sensitive to the effects of lead.

Blood lead levels are used to measure the presence of lead in the body, and even low lead levels are associated with decreased intelligence, reduction in attention span, reading and learning disabilities, and behavioral problems. At high BLLs, lead poisoning can cause seizures, coma, and death. Elevated BLLs in pregnant women are also dangerous and are associated with an increased chance of illness during pregnancy as well as causing harm to the fetus.

### **CDC Guidance**

Although the CDC does not mandate states screen children for lead poisoning, it issues guidelines, followed by most states including Connecticut, on lead screening and treatment. As the adverse health effects of lead poisoning have become known, CDC has decreased the level of lead in blood it considers harmful. In 1985, CDC lowered the level for diagnosing childhood lead poisoning by 40 percent from 40 to 25 micrograms (mcg) of lead per deciliter (dL) of blood. (A microgram is a millionth of a gram; a deciliter is about one-fifth of a pint.) In 1991, CDC moved away from a specific definition of lead-poisoning and substituted the term "level of concern" for blood lead levels equal

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to or greater than 10 mcg/dL.

**CDC screening policy.** Current screening guidelines were published in November 1997 in a document called Screening Young Children for Lead Poisoning: Guidance for State and Local Public Health Officials. The 1997 policy recognizes that lead exposure is highly variable across the country, with some children at high risk and others at very low risk. As a result, CDC recommends state and local health departments assess local data on lead risks and develop lead screening recommendations for health care providers in their jurisdictions, especially focusing on one- and two-year old children. Depending on state and local risk data, in some places it is appropriate to universally screen all children at ages one and two, and screen all children from 36 to 72 months of age who have not been screened previously. In other places, it is appropriate to screen only some children based on specific risk factors (targeted screening).

The CDC's document provides detailed guidance for state and local health departments in establishing their state lead screening plans, including advice on assessing lead risks, promoting the participation of affected constituents in developing recommendations, and communicating the screening recommendations clearly. In its guidelines, the CDC recommends states focus on three groups because of their high risk for lead poisoning. They are children:

- living in geographic areas with a high concentration of old housing;
- receiving public assistance under programs for the poor, such as Medicaid and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC); and
- with other identified individual risk factors.

However, if states do not have the necessary data needed to develop a statewide plan and target screening, CDC recommends states adopt a CDC-developed interim policy or continuation of its 1991 policy of universal yearly screening for all children ages six months to 72 months.

**Treatment policy.** The CDC's guidelines recommend all screening results equal to or greater than 10 mcg/dL be confirmed with a diagnostic test (venous) and various actions be taken at specific elevated blood lead levels. These guidelines are enumerated in Table I-1. In general, confirmed BLLs of 10 to 19 mcg/dL require monitoring the child by further testing and providing family education on how to reduce ongoing lead exposure. More aggressive measures, including a full medical evaluation and the need to have a complete environmental investigation (which may require abatement of lead hazards from the child's residence and are discussed in Chapter Three), are recommended at BLLs of 20 mcg/dL and above.

## National Statistics

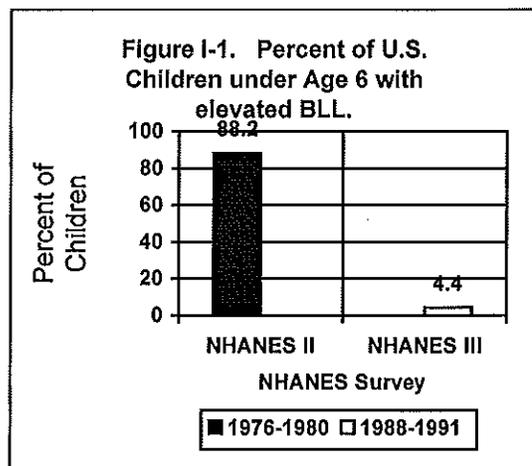
**Blood lead level trends.** The CDC's National Health and Nutrition Examination surveys (NHANES), an ongoing series of national examinations of the health and nutritional status of the civilian noninstitutionalized population, have been the primary source for monitoring BLLs in the U.S. population. These surveys have shown a marked decline in the prevalence of elevated BLLs in recent years, primarily attributed to the ban on lead in: paint; gasoline; food and drink cans; and plumbing systems in the United States during the 1970s.

**Table I-1. CDC Recommended Follow-up Action Required**

<i>Blood Lead Level</i>	<i>Action</i>
<10 mcg/dL	Reassess or rescreen in 1 year. No additional action necessary unless exposure sources change
10-14 mcg/dL	Provide family lead prevention education Provide follow-up testing Refer for social services, if necessary
15-19 mcg/dL	Provide family lead prevention education Provide follow-up testing Refer for social services, if necessary If BLLs persist (i.e., two venous BLLs in this range, at least three months apart) or worsen, proceed according to actions for BLLs 20-44 mcg/dL.
20-44 mcg/dL	Provide coordination of care (case management) Provide clinical management Provide environmental investigation Provide lead-hazard control
45-69 mcg/dL	Within 48 hours, begin coordination of care (case management), clinical management, environmental investigation, and lead hazard control
≥70 mcg/dL	Hospitalize child and begin medical treatment immediately Begin case management, clinical management, environmental investigation, and lead-hazard control immediately

Source: CDC, Screening Guidelines, Nov. 1997, p. 106.

Comparison of the data contained in the NHANES II survey performed between 1976–1980, and NHANES III (1991-1994), indicates the percentage of U.S. children less than age six with elevated BLLs dropped from 88.2 percent in the late 1970s to 4.4 percent in the early 1990s (see Figure I-1). In addition, the overall mean BLL for children one to five years old decreased from 15.0 to 2.7 mcg/dL during this time period.



**Prevalence of lead poisoning in children.** Despite public health goals to reduce lead poisoning and accompanying declines in lead poisoning, in 1997 the CDC estimated 890,000 (4.4 percent) of U.S. children under the age of six still have BLLs equal to or greater than 10 mcg/dL. Therefore, lead poisoning still remains a serious threat for many children.<sup>1</sup> Recent studies conducted by the U.S. General Accounting Office (GAO)<sup>2</sup> as well as results of the NHANES III survey have found children who are poor, non-Hispanic Black, and/or living in urban areas where older housing is deteriorated have a greater prevalence

<sup>1</sup> In 1991, the U.S. Public Health Service called for a society-wide effort to eliminate childhood lead poisoning by 2011.

<sup>2</sup> GAO/HEHS-98-78 and GAO/HEHS-99-18.

of lead poisoning. A discussion of these factors and their link to lead poisoning is discussed below.

*Age factors.* Table I-2 shows the results of the NHANES III survey by age group. Children in the one and two year age group are those most at risk from lead poisoning, and the survey indicated almost 6 percent in that age group had BLLs equal to or greater than 10 mcg/dL. This is somewhat higher than the prevalence in children overall, which is 4.4 percent. In addition, among children age one to five years, 1.3 percent had BLLs greater than or equal to 15 mcg/dL, and only 0.4 percent had BLLs greater than or equal to 20 mcg/dL.

<i>Age Group</i>	<i>Percent with BLL ≥ 10 mcg/dL</i>
1-2 years old	5.9%
3-5 years old	3.5%
Overall (1-5 years old)	4.4%

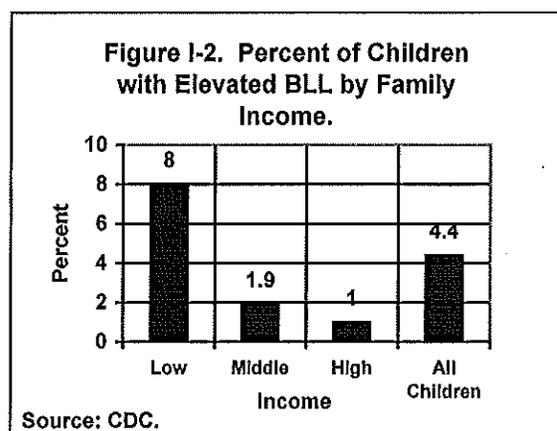
Source: CDC, Morbidity and Mortality Weekly Report, February 21, 1997/ 46(07); p. 141-146.

*Race/Ethnicity factors.* Information from NHANES III (shown in Table I-3) depicts a strong relationship between blood lead levels and race/ethnicity. For example, the table shows the percent of Black children with elevated BLLs (11.2 percent) is almost five times greater than White children (2.3 percent).

<i>Race Ethnicity</i>	<i>% Children 1-5 with EBL ≥ 10 mcg/dL</i>
Black, non-Hispanic	11.2%
Mexican-American	4.0%
White, non-Hispanic	2.3%

Source: CDC, Screening Young Children for Lead Poisoning, Nov. 1997, p. 41.

*Income factors.* Figure I-2 depicts the prevalence of children with elevated BLLs by family income (defined as the ratio of total family income to the poverty threshold for the year of the interview). Although all children are at risk for lead poisoning, the NHANES III survey indicates the prevalence of elevated BLLs for low-income children is much greater than for high-income children. Furthermore, the percent of children with elevated blood lead levels for middle-income children (1.9 percent) was almost double the high-income children (1 percent).



*Children receiving federal health care programs.* A January 1999 study by GAO based on NHANES III survey data, found the prevalence of elevated BLLs for children enrolled in federal health care programs was 8.4 percent, nearly five times the rate for children not in these programs. GAO analyzed the data by individual health programs for children ages one through

five and found the prevalence of elevated<sup>3</sup> BLLs for children receiving Medicaid was 8 percent and WIC was almost 12 percent. In its report, GAO estimates 688,000 (77 percent) of the estimated 890,000 children who have elevated blood lead levels nationwide are enrolled in Medicaid or WIC, or are within the target population served by the Health Center Program (targeted to uninsured and low-income families).

*Age of housing stock.* The age of housing stock is another important factor in determining risk for exposure to lead hazards. Although the primary cause of lead poisoning in children is lead-based paint in pre-1978 housing, the mere presence of lead-based paint is not a hazard. Rather, childhood exposure to lead usually occurs in two ways: deteriorated paint (and resulting dust) in poorly maintained housing, and repainting and remodeling projects that disturb leaded paint without appropriate safeguards to control, contain, and clean up lead dust.

All homes built prior to 1978 are considered to be potential sources of exposure to lead-based paint, however housing built before 1950 generally contains the highest amount of lead-based paint, since paint used at that time had a high lead content. A 1990 report issued by the Department of Housing and Urban Development (HUD) estimated full removal of lead-based paint in U.S. housing stock would cost \$500 billion.<sup>3</sup>

Table I-4 compares New England's housing stock built before 1950 with the total housing units in each state as well as with the United States. As shown in the table, New England has a much higher percent of older housing stock compared to the U.S. total. Massachusetts has the greatest percentage of housing units built before 1950 (47 percent of total housing units), followed by Rhode Island (44 percent) and Maine (41 percent). In Connecticut, 35 percent of the state's total housing units were built prior to 1950.

<i>State</i>	<i>Total Housing Units</i>	<i>Housing Units Built Before 1950</i>	<i>Percent Built Before 1950</i>
Connecticut	1,320,850	462,808	35%
Maine	587,045	242,858	41%
Massachusetts	2,472,711	1,157,737	47%
New Hampshire	503,904	162,201	32%
Rhode Island	414,572	181,215	44%
Vermont	271,214	109,780	41%
United States	102,263,678	27,508,653	27%

Source: CDC, Screening Young Children, Nov. 1997, p. 15

### **Connecticut Statistics**

**Screening.** Blood lead screening of children is an important element in detecting lead poisoning since most children display no obvious symptoms. The state Department of Public Health maintains a childhood Lead Surveillance System (LSS) as part of the Childhood Lead

<sup>3</sup> HUD, Report to Congress, Comprehensive and Workable Plan for the Abatement of Lead-Based paint in Privately Owned Housing, Washington, D.C., U.S. HUD, 1990.

Poisoning Prevention Program. The system contains information on children under the age of six who have been tested for lead poisoning. However, there are several limitations to the database including:

- mandated reporting of all lead screening tests was not required until October 1998, thus data on the total number of children screened prior to that date are incomplete;
- the system does not distinguish between new lead poisoning cases and those carried over from a prior year;
- CDC guidelines do not mandate every child be screened annually up to age six, therefore, lower screening rates for older children do not mean poor state performance;
- data are maintained on a calendar year (CY) basis rather than for birth cohorts, and therefore calendar screening rates can be lower;
- no information is collected on children's health insurers or family income, therefore, comparisons to national data cannot be performed; and
- although required by statute, race/ethnicity data are incomplete, therefore, incidence rates cannot be compared among various ethnic groups in Connecticut.

*Screening rates.* Given these caveats, Table I-5 shows screening rates for all children under the age of six as well as the percent of children age one and two screened in CY 1998. Based on 1990 census data, there were 272,294 children less than six years old in Connecticut, of which 87,503 were age one or two. Twenty percent of children under the age of six (54,850) had a valid screen for lead poisoning in 1998. Furthermore, 30 percent of children age one and two statewide had a valid lead screen in CY 1998. Children living in Hartford had the highest screening rate overall and those in Stamford the lowest.

<i>Top 5 Towns &amp; Connecticut</i>	<i>Number of Children under the Age of Six</i>	<i>Number of Children under the Age of Six with Valid Screen</i>	<i>Percent of Children under the Age of Six with Valid Screen</i>	<i>Percent of Children Ages 1 and 2 with Valid Screen</i>
Hartford	14,245	6,122	43%	63%
Bridgeport	14,013	3,836	27%	42%
New Haven	12,076	3,699	31%	48%
Waterbury	10,139	3,187	31%	39%
Stamford	8,687	2,165	25%	32%
Connecticut	272,294	54,850	20%	30%

Source: DPH.

The program review committee recognizes 1990 census data are not the most accurate population statistic to use in 1999, especially when measuring a segment of the population not even born in 1990. However, 1990 census data are the population database DPH uses as its base to calculate the percent of children screened for lead poisoning in each calendar year. The committee compared the 1990 population with 1998 population estimates and birth statistics

statewide and calculated the number of children under the age of six in 1998 was approximately 263,000. This is a decrease of about 3.5 percent since 1990 but certainly not a significant decline. Further, the variation between the 1998 estimates and the 1990 census data for any of the individual towns cited did not exceed 5.5 percent in either direction.

*Pilot project.* The state Department of Public Health conducted a pilot project on lead screening rates in Hartford to determine if Medicaid recipients had received a blood lead screening in 1997 as required by Medicaid. The study examined children born in Hartford in 1995 who were Hartford residents and recipients of Medicaid managed care during all of 1997. The results show 73.5 percent of the children meeting the study criteria were screened in 1997. The percent of children screened increased to 93.2 percent when the study criteria were broadened to include children in the study group who were screened at any time since birth. In addition, the department tracked all Hartford residents born in 1995 and found 90 percent had been screened at least once for lead poisoning. Similar pilots are being conducted in Bridgeport, Montville, New Haven, Norwich, and Waterbury. Comparisons with national screening data however, could not be made because of the difference in methodology between this study and national surveys.

**Incidence of lead poisoning.** Table I-6 shows the number of children screened and identified statewide with an elevated blood lead level in 1998 and by the top five towns. (A complete listing for all towns is provided in Appendix B.) Overall there were 54,850 children less than age six with a valid lead screen -- 4.6 percent had a BLL equal to or exceeding 10 mcg/dL and of those, 1.1 percent were equal to or greater than 20 mcg/dL. Since CDC's 1997 screening guidelines specifically recommend targeting children age one and two, incidence data for this age group are also shown in the table. In terms of one- and two-year-old children, there were 26,401 with a valid lead screen -- of those, 4.6 percent had BLLs equal to or greater than 10 mcg/dL and 1.2 percent equal to or greater than 20 mcg/dL.

<i>Top 5 Towns &amp; CT Overall</i>	<i>Total Screened Age 1 and 2</i>	<i>Total Screened birth - 5</i>	<i>≥10 mcg/dL</i>		<i>≥ 20 mcg/dL</i>	
			<i>Age 1 and 2</i>	<i>Age Birth - 5</i>	<i>Age 1 and 2</i>	<i>Age Birth - 5</i>
Bridgeport	1,905	3,836	331	670	88	160
Hartford	2,823	6,122	218	389	55	85
New Haven	1,715	3,699	269	547	79	148
Waterbury	1,308	3,187	66	163	23	49
Stamford	1,156	2,165	20	47	5	10
Connecticut	26,401	54,850	1,220	2,522	312	598

Source: DPH.

Of the 2,522 screening results with BLLs 10 or greater, 598 (23 percent) had levels equal or greater than 20 mcg/dL -- the level at which an epidemiological as well as an environmental inspection must occur under Connecticut's lead law. For one and two year olds, 1,220 had levels of 10 mcg/dL or greater and 26 percent of those children had an elevated level of 20 mcg/dL or greater.

As depicted in the table, Bridgeport had the greatest number of children with elevated blood lead levels, followed by New Haven, and Hartford. These three cities, the largest in Connecticut, have the greatest number of children younger than six years old, high poverty rates, and a large portion of their housing stock was built prior to 1950.

**Connecticut's housing stock.** As noted above, housing built prior to 1950 has the greatest likelihood of containing lead paint, and thus, children residing in those housing units are at a higher risk for lead poisoning. Thirty-five percent of Connecticut's housing stock was built prior to 1950 and 84 percent before 1980. Table I-7 shows those Connecticut towns with the highest percentages of pre-1950 housing by county.

<b>Table I-7. Towns with highest Percent of Pre-1950 Housing by County.</b>		
<i>County</i>	<i>Town</i>	<i>Percent Pre-1950 Housing</i>
Fairfield	Bridgeport	54%
	Darien	50%
	Greenwich	46%
Hartford	Hartford	52%
	New Britain	49%
	West Hartford	48%
Litchfield	North Canaan	55%
	Cornwall	52%
	Norfolk	64%
Middlesex	Chester	51%
	Deep River	45%
	Portland	42%
New Haven	New Haven	57%
	Ansonia	52%
	Waterbury	46%
New London	New London	62%
	Sprague	58%
	Norwich	55%
Tolland	Stafford	45%
	Union	40%
	Coventry	35%
Windham	Putnam	49%
	Windham	44%
	Killingly	43%
Connecticut		35%
United States		27%

Source: Report on the Status of Lead Poisoning in Connecticut, OHCA, DPH, March 1998, p.4.

Housing condition is strongly related to the economic status of the people who live in it. Low-income households often cannot afford to adequately maintain and/or repair the units in which they live. As a result, a large portion of Connecticut's housing stock presents a potential

hazard for lead-based paint poisoning, and the major portion of that stock is found in larger municipalities where low- and very low-income persons are most likely to reside.

In its Consolidated Plan for Housing and Community Development (January 3, 1995), the Department of Economic and Community Development estimated the number of Connecticut housing units at high risk of having lead paint hazards. These estimates (shown in Table I-8) indicate 17.7 percent of CT's total housing units present a potential lead-paint hazard to the families who live in them.

**Table I-8. Estimated Number of Housing Units with Lead Paint by Year Built.**

<i>Type of Housing</i>	<i>Pre-1940 Housing Units</i>	<i>1940-1959 Housing Units</i>	<i>1960-1980 Housing Units</i>	<i>Total Housing Units</i>
Total Housing	307,378	333,654	339,132	980,164
Affordable to low income households	112,402	80,214	113,575	306,191
With lead paint (est.)	101,161	64,171	70,416	235,748

Source: Consolidated Plan for Housing and Community Development, January 3, 1995, p.52.

As shown in the table, there are 980,164 total housing units in Connecticut, with low-income households occupying 306,191 units. Furthermore, the department estimates 77 percent (235,748) of low-income housing units are potentially high risk for containing lead paint hazards. Thus, a significant portion (24 percent) of Connecticut's total housing stock presents a potential lead hazard risk. It is important to note, however, the number of low-income units occupied by children who are at the greatest risk for lead poisoning, is not estimated by the department.

### Summary

Although BLLs in the U.S. population have dramatically declined since the late 1970s, the risk for lead exposure remains disproportionately high for some groups. As a result of the decline in prevalence, and survey data showing age, income level, race/ethnicity, and age of housing are key factors in determining children's risk for lead poisoning, CDC revised its guidelines in 1997. The guidelines recommend state health departments assess local data on lead risks and develop either universal or targeted screening recommendations based on the data. In addition, CDC recommends screening policy be focused on one- and two-year old children, since this age group nationally proved to have the highest prevalence of elevated blood lead levels.

Connecticut currently recommends, but does not mandate, all children between the ages of one and six be screened for lead poisoning, with particular focus on children ages one and two. Connecticut's policy of universal screening is based on the fact 35 percent of the state's housing stock was built before 1950 and prevalence data needed to develop a more targeted screening guideline are not available.



## Federal Law and Regulation

As the dangers of lead hazards to children have become more widely known, federal and state laws aimed at preventing childhood lead poisoning have grown more complex since legislation was first enacted in 1971. Multiple federal agencies are responsible for administering laws passed by Congress, providing funding to states, and developing regulations, policies, and guidelines to assist states in administering their own lead programs. This chapter describes the government structure in place to combat lead poisoning and the role of the federal government in lead hazard prevention activities.

### Government Organization

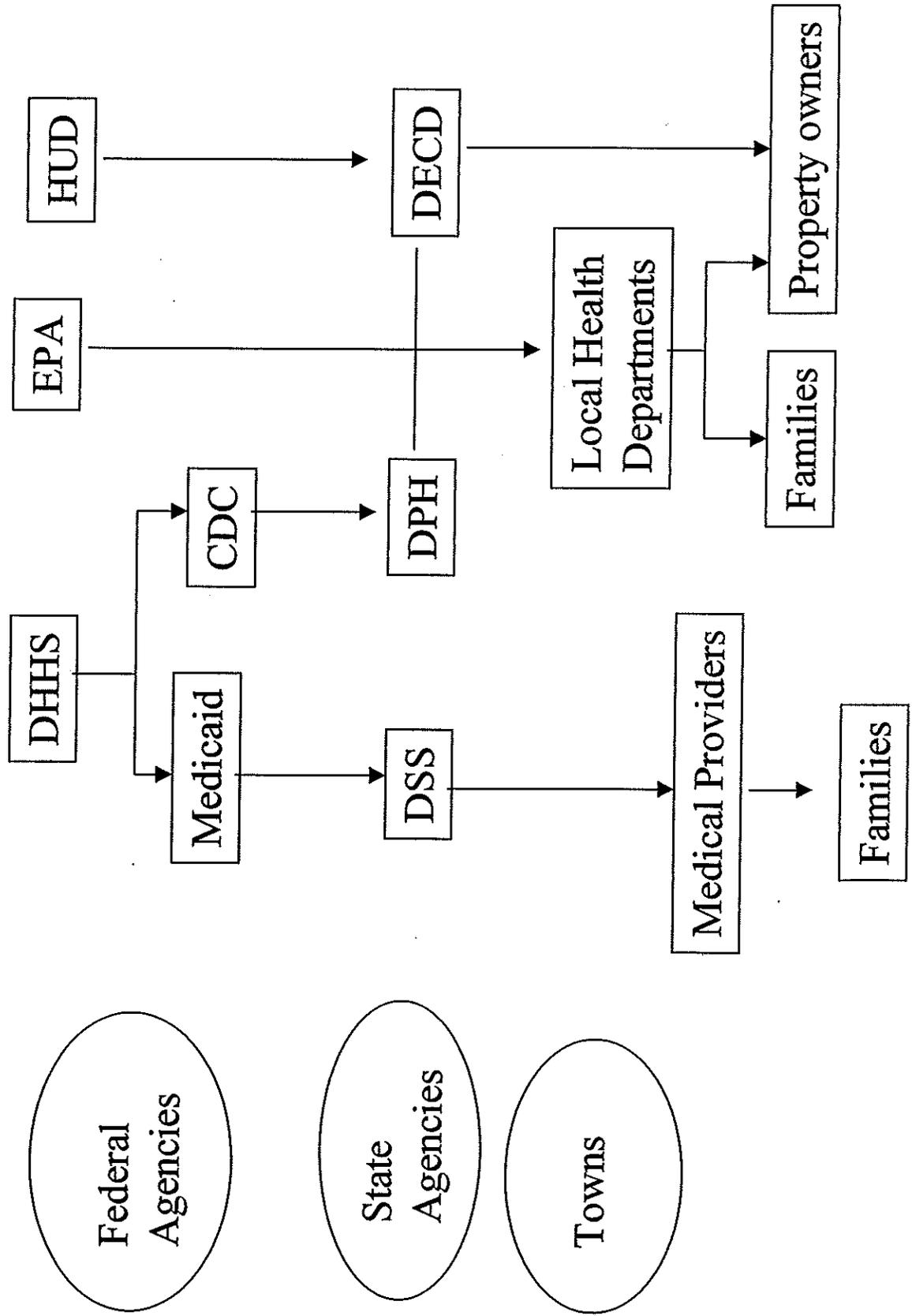
**Introduction.** Figure II-1 identifies federal, state, and local agencies responsible for lead prevention and/or abatement activities. At both the federal and state level, the focus is concentrated on two activities:

- ensuring primary and secondary lead prevention activities occur to protect or treat the child (i.e., education, screening, surveillance, and case/medical management, and environment clean-up); and
- establishing thresholds for abatement of lead hazards and ensuring proper abatement methods are used.

**Federal structure.** At the federal level, the Department of Health and Human Services, through the Centers for Disease Control, issues guidelines for screening young children, details case management activities for children who are lead poisoned, and provides funding for prevention and education programs. As noted in Chapter One, CDC recommends state and local health departments assess state and local data on lead risks and adopt a statewide lead screening plan that recommends either universal or targeted lead screening. In addition, CDC grants are available to states to conduct prevention activities.

**Medicaid requirements.** Under Medicaid, all children are considered at risk and must be screened for lead poisoning. The Health Care Financing Administration (HCFA) requires all Medicaid-eligible children to receive a screening blood lead test at 12 months and 24 months of age. Children between the ages of 36 months and 72 months of age must receive a screening blood lead test, if they have not been previously screened for lead poisoning. If a state adopts a statewide plan for screening children for lead poisoning (as recommended by CDC) the plan must require lead screening for all Medicaid-eligible children.

Figure II-1. Organization for Lead Prevention and Abatement.



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*Other federal agencies.* The Department of Housing and Urban Development is the lead agency responsible for federal efforts to eliminate lead-based paint hazards from housing in the United States. Grants are available from HUD to state and local governments to provide financial assistance to private property owners to abate lead hazards. In addition, a recently adopted HUD regulation, described below, requires widespread lead hazard reduction occur in federally owned and assisted housing. The Environmental Protection Agency coordinates and uses its regulatory authority to reduce lead in the environment, and the Department of Labor protects workers from lead dangers. The EPA offers grants to states to operate their lead licensing and certification programs for lead contractors and workers.

**State structure.** At the state level, the Department of Public Health operates the Childhood Lead Poisoning Prevention Program, which oversees prevention activities, and ensures local health departments (LHDs) enforce Connecticut's lead laws related to lead inspections and abatement. The department also issues screening and treatment guidelines, funds two Regional Lead Treatment Centers (one at Saint Francis Hospital and another at Yale), and promotes educational activities. In addition, the Department of Economic and Community Development administers federal and state grant/loan programs that can be used by private property owners to pay for lead abatement expenses.

**Local structure.** Finally, at the local level, 108 health departments/districts are responsible for conducting epidemiological investigations once a child is identified with a BLL of 20 mcg/dL or greater. In addition, health departments/districts or local code enforcement agencies conduct environmental investigations, issue abatement orders to property owners if lead hazards are present, and ensure compliance with the order through re-inspection or referral to the courts. Educational activities focusing on the hazards of lead also occur at the local level.

## **Federal Law**

**Initial federal legislation.** Concern about the hazards of lead prompted federal action in 1971 when Congress enacted the Lead-Based Paint Poisoning Prevention Act (LPPPA). The act provided a definition of lead-based paint (any paint containing more than 1 percent lead by weight) and also initiated programs to screen children and abate the sources of lead in residential housing by providing funds to states to establish programs. Amendments to the act gave HUD significant responsibility for lead-based paint hazards (1973) and lowered the standard for allowable lead in paint from 1 percent to .06 percent (1977), the current standard. Specifically, the LPPPA directed the Department of Health and Human Services to:

- prohibit the use of lead-based paint in residential structures constructed or rehabilitated by the federal government or with any form of federal assistance;
- establish a national program to encourage and assist states and cities to conduct mass screenings to identify children with elevated blood lead levels and make sure they receive medical treatment;
- investigate children's residences for sources of lead; and
- order abatement of lead from the residences if necessary.

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The CDC administered appropriations under the act, which provided for the establishment of screening programs until 1981, when funding was incorporated into the Maternal and Child Health Services Block Grant (MCH). Currently, states that receive MCH grants may, but are not required to, use these funds for childhood lead poisoning prevention.

**1988 federal legislation.** The Lead Contamination Control Act (LCCA) was enacted in 1988. The act authorized CDC to provide grants to states and towns to administer a program for preventing childhood lead poisoning. As part of the program, funding is available for screening, referral of cases of elevated blood lead levels for treatment and environmental case management, and for education to high-risk communities. Major provisions of the act regulate drinking water to ensure it is lead safe.

**The Residential Lead-Based Paint Hazard Reduction Act.** The Residential Lead-Based Paint Hazard Reduction Act of 1992 (Title X of the Housing and Community Development Act) initiated major changes in the federal lead law. Prior federal policy encouraged full abatement of lead-based paint, regardless of its condition or location, in federally owned or subsidized housing. With the passage of Title X, the policy focus shifted from full abatement to property maintenance and provided for resources to be focused only on lead-based paint hazards. Under Title X, intact lead-based paint on most surfaces is not considered a hazard until it has deteriorated, thus requiring it be monitored and maintained. Title X emphasizes identification and control of lead hazards in federally assisted or owned housing and notification to occupants of the existence of known lead hazards in all housing.

*Agencies responsible for implementation.* The act requires several federal agencies to establish a coordinated effort to reduce lead hazards. Three main agencies are responsible for implementation of Title X -- the Department of Housing and Urban Development; the Environmental Protection Agency; and the Occupational Safety and Health Administration (OSHA) of the U.S. Department of Labor. In general, the act:

- imposes detailed requirements and deadlines for lead hazard reduction on federally owned, insured, and assisted housing;
- promotes lead hazard reduction in privately owned housing through the provision of state and local grants;
- requires training and certification or licensure of abatement contractors, risk assessors, and lead inspectors;
- establishes a national task force to examine issues of lead abatement;
- requires disclosure of known lead hazards by private property owners;
- directs HUD to develop technical guidelines for hazard evaluation and control practices and to overhaul its regulations related to lead-based paint;
- directs EPA to set standards for lead contaminated dust and soil hazards and for states to accredit laboratories; and
- provides for public outreach and education.

*Defining lead hazards.* Title X defines "lead-based paint" as paint on surfaces with a lead concentration of 1.0 milligram per square centimeter (mg/cm<sup>2</sup>) or 0.5 percent by weight.

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The .06 percent threshold for the actual lead content in new paint, established in 1977, was not changed.

The act focuses resources on situations believed to present lead exposure hazards, not just on any lead paint, and defines the term “lead-based paint hazard” as any condition that causes exposure to lead sufficient to cause adverse human health effects. Six situations are cited:

- deteriorated LBP – any interior or exterior LBP that is peeling, chipping, chalking, or cracking or located on any surface or fixture that is damaged or deteriorated;
- LBP on any friction surface – an interior or exterior surface subject to abrasion or friction, such as painted floors and friction surfaces on windows;
- LBP on any accessible surfaces – an interior or exterior surface painted with LBP that is accessible for a young child to mouth or chew;
- LBP on any impact surface – an interior or exterior surface subject to damage by repeated impacts, such as parts of door frames;
- lead-contaminated dust – surface dust in residential dwellings that contains an area or mass concentration of lead in excess of the standard to be established by EPA; and
- lead-contaminated soil – bare soil on residential property that contains lead in excess of the standard to be established by EPA.

**Title X requirements by type of housing.** Title X addresses three types of housing – private property, public, and federally assisted or owned. The act’s requirements differ depending on the type of housing. For example, in federally assisted or owned housing, complete evaluations of lead-based paint hazards must be conducted and corrected by specific dates. A more detailed description of what the act requires, by type of housing, is provided below.

*Private property.* Although interim controls and abatement are required in federally owned and assisted properties, it is important to remember there are no similar federal mandates for privately owned property. However, the act does impact private property owners in three ways:

- *Lead hazard disclosure for selling or leasing pre-1978 housing.* Private property owners of pre-1978 properties and their agents seeking to sell or lease the property must provide prospective buyers and tenants an educational pamphlet (developed by EPA, HUD, and the Consumer Product Safety Commission) about lead hazards to children and disclose known information about the presence of lead-based paint and lead hazards in the particular property. In addition, buyers have up to 10 days to hire a lead inspector or a risk assessor to inspect the property at their own expense. Joint HUD and EPA regulations implementing these provisions became effective in December 1996. Civil penalties may be imposed on owners not complying.

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- *Renovation activities.* As of June 1, 1999, the EPA requires renovators, working for compensation, to distribute a pamphlet to owners and occupants of most housing built prior to 1978 before beginning renovation activities. Renovation activities that disrupt more than two square feet of paint are covered by this rule. The pamphlet discusses ways in which individuals can protect themselves and their families from lead-based paint hazards.
  - *Grant funds to abate lead hazards in private property.* Title X established a grant program that authorized HUD to distribute funds to states and municipalities to reduce lead paint hazards in privately owned housing built before 1978 and occupied by low-income families. Connecticut received a \$6 million grant award in 1995, and submitted a \$4 million application for another HUD grant in May 1999. However, Connecticut was not one of the selected grantees when HUD announced the awards in November 1999.

*Public housing.* For public housing, Title X leaves intact the 1988 statute's requirements for inspections of all developments by December 1994, and abatement of all lead-based paint (not just lead-based paint hazards) in the course of modernization projects.

*Federally assisted and associated housing.* Many of the key provisions of Title X are designed to substantially expand the scope of lead-hazard evaluation and reduction activities in federally owned and assisted housing. As of January 1995, the act requires, within available appropriation, lead-hazard reduction (interim controls or abatement) in federally assisted or owned housing. Interim controls temporarily reduce exposure to lead hazards and include such measures as temporary containment, repairs, repainting, and specialized cleaning. Long-term interventions include abatement measures such as paint removal, enclosure, encapsulation, or component replacement (e.g., windows). This is to be accomplished by conducting inspections to identify the presence of lead paint hazards, using the six criteria cited above.

The act allows LBP-hazard evaluation and reduction activities to be eligible for funding under Community Development Block Grants, HOME grants, all HOPE programs, rural housing programs, FHA Home Improvement and Rehabilitation Loans, and makes them eligible rehabilitation activity under FHA Insurance for Multifamily Housing. Abatement requirements also apply to federal agencies that own or control properties that may eventually be transferred to residential property.

Implementation of these requirements has been problematic according to DPH and DECD staff, and HUD has not met the time frames established under the act, largely due to lack of funding. However, the recently approved HUD regulation re-establishes time frames and specifically defines the lead hazard reduction activities that must occur in federally owned and assisted housing, and public housing.

*Housing and Urban Development lead-based paint regulation.* Although Title X was passed in 1992, it has taken seven years for HUD to publish a final regulation, which completely overhauls lead-safety requirements covering federal housing assistance and community development programs. The new regulation -- "Requirements for Notification, Evaluation and

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Reduction of Lead-Based Paint Hazards in Federally Owned Residential Property and Housing Receiving Federal Assistance” – was adopted in September 1999. It consolidates all of the department’s lead-based paint regulations in one part of the Code of Federal Regulations and becomes effective in September 2000.

The purpose of the HUD regulation is to protect young children from lead-based paint hazards in housing financially assisted by the federal government or being sold by the government. HUD cites the latest scientific research, as well as practical experience in its grant programs and CDC guidelines, along with recommendations of a national task force, in establishing the final rule.

The regulation will be a major force driving lead hazard reduction in federally owned and assisted housing over the next several years. It strengthens the federal government’s commitment to primary prevention -- reducing children’s exposure to lead hazards before they are poisoned -- by requiring lead hazards to be addressed in housing supported by U.S. government dollars. Accomplishment of the requirements in the rule will have a dramatic impact on lowering children’s risk of lead poisoning, since most of the housing affected by the rule is targeted to low- and moderate-income renters and usually located in urban areas. Studies have shown low-income children, those who receive public assistance, and those who live in urban areas are at high risk for lead poisoning.

*Estimated benefits and costs.* As with all federal regulations, HUD was required to estimate the impact in terms of costs and benefits. The regulation will protect more than two million children from lead exposure during its first five years. In addition, HUD estimates the value of total benefits in the first five years at \$2.65 billion with a cost of only \$564 million. Estimated benefits are derived from assumptions about increased lifetime earnings, savings from medical care, and special education costs. It is estimated about 2.8 million U.S. housing units will be affected by the regulation during its first five years. The average cost to implement the regulation, according to HUD, is estimated at approximately \$200 per unit (\$564 million divided by 2.8 million units).

*Types of housing affected.* The regulation applies only to housing built before 1978, the year lead-based paint was banned by the U.S. government, and covers all federal HUD housing and community development programs from Section 8 to public housing. Table II-1 identifies the types of housing covered and excluded under the regulation.

*Regulatory requirements.* HUD identifies four basic principles embodied by the new regulation. First, regardless of the lead hazard reduction methods used, clearance is required. (Clearance includes visual inspection and scientific testing of settled dust for lead after work is performed). Second, ongoing lead-based paint maintenance practices are obligatory in rental housing whenever HUD has a continuing relationship with the property. Third, to ensure the controls are still intact and effective over time, reevaluation is required whenever a risk assessment and interim controls are required and there is a continuing HUD subsidy or ownership of rental housing. Fourth, whenever a child is identified with a blood lead level that calls for an environmental assessment and intervention, special procedures are required in programs with a continuing subsidy or HUD ownership of rental housing.

<b>Table II-1. Types of Housing Affected by New HUD Regulation.</b>	
<i>Types of Housing Covered</i>	<i>Types of Housing Not Covered</i>
<ul style="list-style-type: none"> <li>• Federally owned housing being sold</li> <li>• Housing receiving a federal subsidy (project based)</li> <li>• Public housing</li> <li>• Housing occupied by a family receiving a tenant-based subsidy (such as a Section 8 voucher or certificate)</li> <li>• Multifamily housing for which mortgage insurance is being sought</li> <li>• Housing receiving federal assistance for rehabilitation, reducing homelessness, and other special needs</li> </ul>	<ul style="list-style-type: none"> <li>• Housing built since January 1, 1978</li> <li>• Housing exclusively for the elderly or people with disabilities, unless a child under the age of 6 is expected to reside there</li> <li>• Zero-bedroom dwellings</li> <li>• Property found to be free of lead-based paint by a certified lead-based paint inspector</li> <li>• Property where all lead-based paint has been removed</li> <li>• Unoccupied housing that will remain vacant until it is demolished</li> <li>• Nonresidential property</li> <li>• Any rehabilitation or housing improvement that does not disturb a painted surface</li> </ul>
<p>Source of data: HUD, Requirements for Notification, Evaluation and Reduction of Lead-Based Paint Hazards in Housing Receiving Federal Assistance and Federally Owned Residential Property being Sold, Questions and Answers, September 16, 1999.</p>	

At a minimum, the regulation mandates:

- identification and correction of deteriorated lead-based paint before children are lead-poisoned;
- use of safe work practices if lead-based paint is disturbed during rehabilitation projects (only when the area of paint being disturbed is greater than 20 square feet on exterior surfaces; two square feet in an interior room; or 10 percent of a building component with a small surface area); and
- performance of clearance following paint stabilization to ensure clean up of dust, paint chips, and other debris is satisfactory.

*Lead reduction and abatement strategies.* The scope of the lead hazard reduction activities, their estimated cost of implementation, and their lasting effectiveness fall along a continuum under the rule. Four factors determine the extent of the requirements:

- whether the housing is being disposed of or assisted by the federal government;
- the type and amount of financial assistance provided;
- the age of the structure; and
- whether the dwelling is rental or owner-occupied.

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Housing receiving high amounts of federal financial assistance has the most stringent requirements under the rule.

Specifically, there are seven evaluation and hazard reduction strategies for HUD housing programs. All except the first two require the use of certified lead-based paint professionals for risk assessments, inspections, and abatement. In addition, clearance examinations, which must be performed for all methods listed below, must be done by a person who did not perform the hazard control work and who is certified to perform lead-based paint inspections, risk assessments or clearance examinations in the state. The strategies, in order from least to most stringent, are:

- safe work practices during rehabilitation;
- ongoing lead-based paint maintenance practices to assure paint is maintained so it remains intact and safe work practices are used (this is basically Essential Maintenance Practices, as recommended by the national task force and by the program review committee in Chapter Five);
- visual assessment and paint stabilization (which includes correcting the underlying cause of paint deterioration and applying a new protective coating of paint.);
- assessment of risk for lead-based paint and if found, interim controls;
- Lead-based paint inspection and risk assessment, and interim controls;
- Risk assessment and abatement of lead-based paint hazards; and
- Lead-based paint inspection and abatement of all lead-based paint.

The specific requirements by housing type are provided in Appendix C, and a glossary of terms used in the rule is provided in Appendix D.

*Relocation of residents.* By regulation, occupants do not always have to be relocated out of their dwelling unit during lead hazard control work. Many jobs may be performed without relocation if the work area is contained so dust generated by the work does not migrate to the rest of the living area during the work, cleanup, and clearance. However, the regulation states occupants should never be permitted to enter a room or hallway while work is underway and it is generally safer to relocate occupants until the work has been completed.

*Elevated blood lead level.* There are special regulatory protections for a lead-poisoned child. A risk assessment of the child's dwelling must be completed within 15 days after the owner is notified of the presence of a lead-poisoned child by a health department. If lead-based paint hazards are identified, corrective action must be taken within 30 days of the assessment. The regulation does not define at what blood lead level a child is lead-poisoned, but instead identifies an "environmental intervention blood lead level." The environmental intervention level is defined as when a child less than six years of age has a blood lead level of 20 mcg/dL or greater for a single test, or 15-19 mcg/dL in two tests taken at least three months apart.

**Environmental Protection Agency.** Title X also requires the U.S. Environmental Protection Agency to take several actions. The agency has developed standards for states to

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follow to receive EPA-approval of state programs for certification of firms and individuals performing lead-based paint activities and associated work practices. The EPA has established a program for the accreditation of laboratories for analysis of lead in paint, dust, and soil.

The EPA is in the process of finalizing proposed standards (as required under Title X) that identify the conditions and/or levels of lead in paint, dust, and soil that present risks to young children. The rule will establish residential, lead-dust cleanup levels (i.e., what the acceptable thresholds are for lead dust after abatement) and revises dust and soil sampling requirements.

HUD has adopted the proposed standards in its regulation and will mirror the levels established by the EPA once the EPA rule is finalized. In addition, HUD intends to link a state and local government's eligibility for the HUD Lead-Based Paint Abatement Grant Program for private property owners to that state's adoption of the EPA's health-based standards (or one at least as protective) once they are finalized.

**Task force recommendations.** Title X also established a national task force to examine several issues including legal liability, insurance, and financing of lead abatement activities. Task force membership had broad representation and included: property owners; tenants; attorneys; lenders; insurers; contractors; and experts and advocates for lead poisoning prevention. The task force's final report Putting the Pieces Together: Controlling Lead Hazards in the Nation's Housing was issued in July 1995 and contained numerous recommendations, which are discussed below.

*Essential maintenance practices.* The recommendations called for the establishment of a set of "benchmark standards," which identify the steps owners of rental property need to take to control lead hazards. For well-maintained properties, which are considered low risk, a set of "Essential Maintenance Practices" (EMPs) applies. EMPs are aimed at keeping paint intact and thus preventing deterioration of leaded paint. EMPs are considered low-cost. They rely on property maintenance staff having a one-day basic training session in lead safety, which emphasizes the need to control, contain, and clean up lead dust generated in repair, repainting, and remodeling projects. In July 1997, HUD and EPA issued a one-day training course for rental property maintenance workers.

For "higher priority" properties, the task force called for more aggressive measures, including giving property owners the option of:

- hiring a certified risk assessor to determine if the paint contains hazardous lead levels and whether soil is contaminated, or
- performing a prescribed set of "Standard Treatments," primarily when the rental unit turns over. These include: repairing deteriorating paint; providing smooth, cleanable surfaces to avoid trapping lead dust; covering or limiting access to bare soil; specialized cleaning; and follow-up testing of floors and window sills to ensure successful removal of lead-contaminated dust.

The task force also recommended that states pass legislation to provide incentives for rental property owners to implement effective hazard controls, including limiting legal liability

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for those who can independently document compliance with maintenance practices. The task force's recommendations were drafted into model legislation by the National Conference of State Legislatures (NCSL) in August 1996.

While no state has fully adopted the model law, several state and local governments have implemented parts of it. For example, since Vermont's lead law was passed in 1996, more than 6,500 individuals, primarily rental property owners and managers, have received Essential Maintenance Practices training.

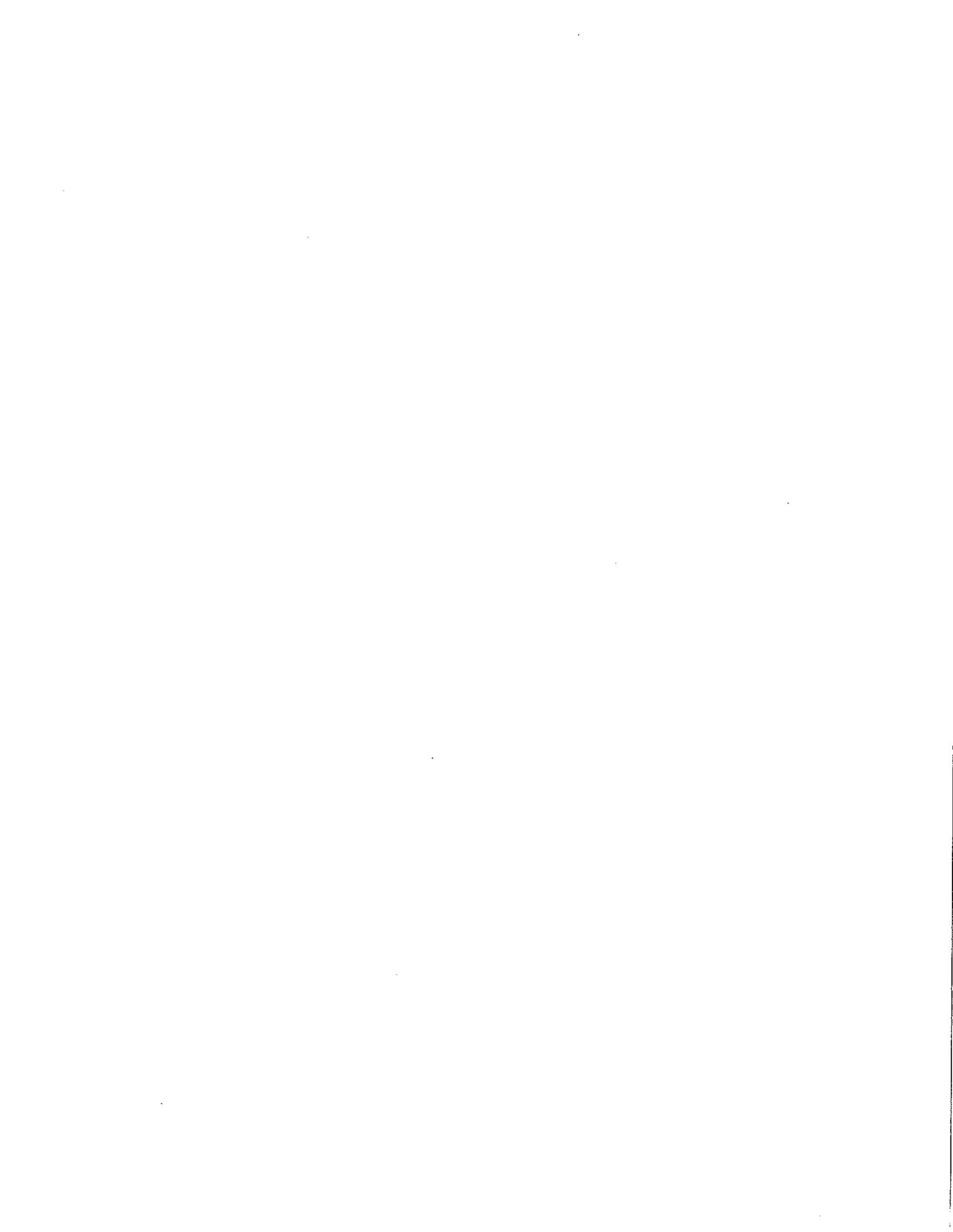
## **Summary**

Multiple layers of government are involved in the prevention of childhood lead poisoning. The organizational structure in place at the federal level, responsible for administering lead laws passed by Congress and developing regulations and guidelines, is fragmented and involves several different agencies, each with a distinct area of expertise. Agencies are split into two discrete groups: CDC and HCFA are concerned with lead prevention and treatment of lead-poisoned children, while HUD and EPA efforts are targeted at ensuring lead hazards in the nation's housing are addressed. Title X attempted to coordinate the efforts of the various agencies with limited success, since many of the mandates are directed only at certain properties under the jurisdiction of federal control.

Much of the funding to deal with lead prevention and abatement comes from a variety of federal government agencies, each with their own concerns and requirements. The funding is funneled to the states, and often down to the local level.

Title X, in conjunction with the new HUD regulation, clearly makes the federal government the leader in preventing childhood lead poisoning by linking the reduction and/or elimination of lead hazards to the receipt of federal financial assistance for housing programs. The focus of the regulation is on requiring identification and correction of lead hazards before children become lead poisoned. In addition, federal policy targets housing programs that assist low- to moderate-income families whose children are at greatest risk for lead poisoning.

The regulation will have a major impact on the private rental housing market, since a rental property owner will likely comply with the requirements for all units, rather than only target those subsidized by federal dollars (such as in tenant-based Section 8 housing). The recommendations made in this report will further enhance federal policy by applying similar safeguards to areas not covered by federal law.



### State Law and Regulation

The Department of Public Health is the lead agency for state lead prevention activities and oversight of enforcement actions conducted by local health department and code enforcement agencies. Connecticut's law requires property owners to abate defective interior and exterior surfaces that contain toxic levels of lead and are in a residential dwelling where children under the age of six reside. This chapter provides an overview of Connecticut's laws and regulations requiring lead abatement.

**History.** Although Connecticut has required reporting of elevated blood lead levels by physicians since 1971, it did not begin an aggressive lead program until 1987. Public Act 87-304 established a Lead Poisoning Prevention Program (LPPP) in the then Department of Health Services (currently the Department of Public Health). The act required the health commissioner to:

- conduct educational and publicity activities on lead poisoning prevention;
- establish an early diagnosis and detection program that would routinely screen young children;
- attempt to identify dwellings and areas with toxic levels of lead;
- adopt regulations concerning certifying lead inspectors and lead abatement and removal contractors; and
- adopt regulations on removal and abatement materials.

The act also required that property owners remove or cover toxic lead materials if children under aged six resided in the dwelling.

Public Act 87-304 has been modified several times; each time the law became more stringent. For example, following the guidelines issued by the Centers for Disease Control two acts lowered the blood lead concentration that defines lead poisoning. Public Act 87-304 substituted 25 mcg/dL for the previous 40 mcg/dL as the reportable level for lead poisoning. Public Act 92-192 again lowered the reportable blood lead level threshold (from 25 mcg/dL to 10 mcg/dL – the threshold established by the CDC as the “level of concern”) and specified the local health official must conduct an epidemiological investigation of the lead source upon receiving a report of a blood lead level of 20 mcg/dL. Most recently, legislation adopted in the early 1990s established two regional lead poisoning treatment centers and directed the DPH commissioner to establish guidelines for assessing the risk of lead poisoning,

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screening, and follow-up in accordance with CDC guidelines. (For a complete legislative history, see Appendix E).

**Current law and regulations.** Regulations for the lead program became effective September 1992 and, together with C.G.S. 19a-110 through 19a-111e, define Connecticut's lead policy. Under Connecticut law, property owners are liable for abatement of defective interior and exterior surfaces that contain toxic levels of lead and are in a residential dwelling where children under the age of six reside. The regulations do not require a child be diagnosed with an elevated blood lead level in order for them to be applicable. However, if a child has been identified with an elevated blood lead level, stricter requirements ensue.

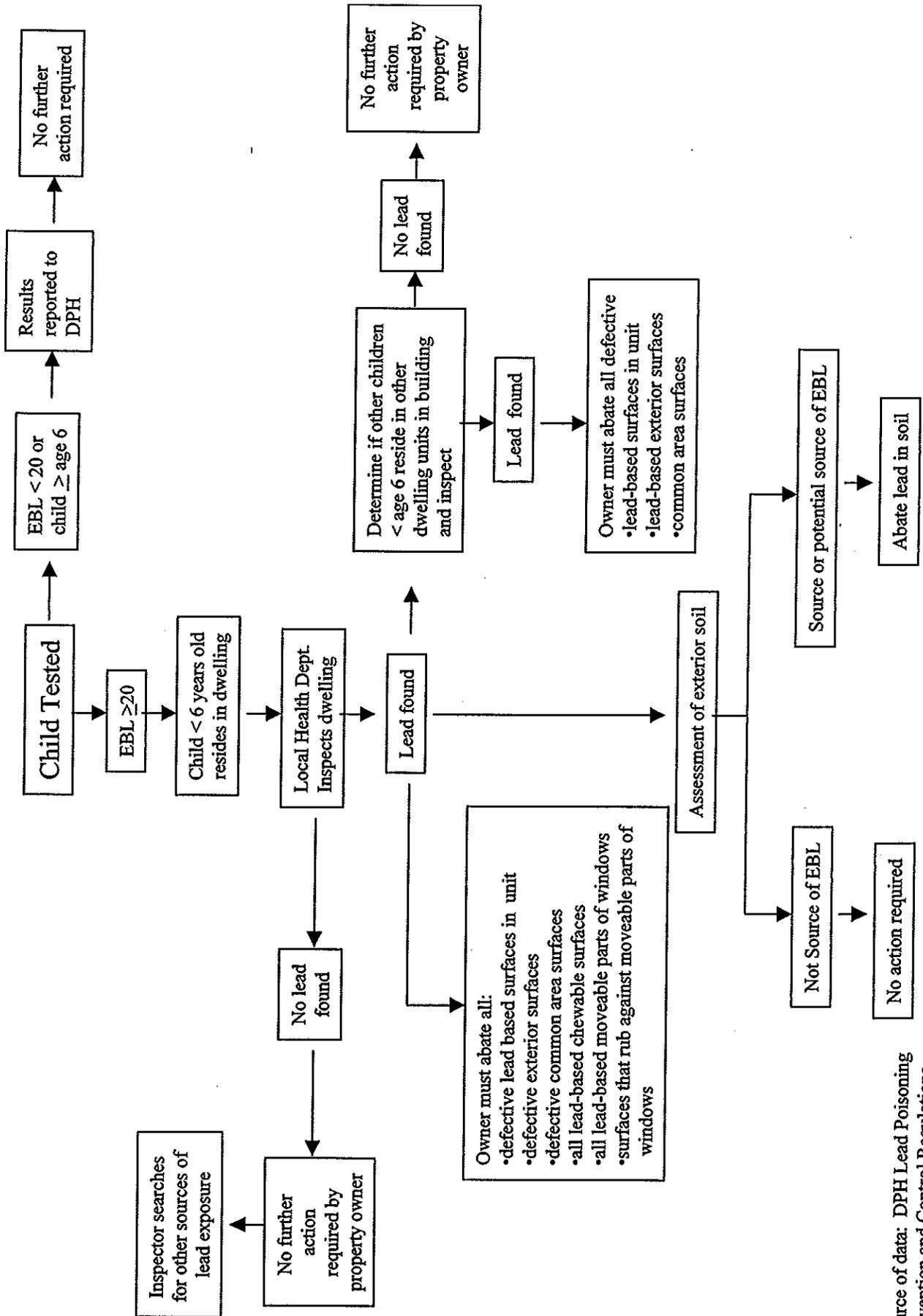
*Reasons for inspections.* In most cases, an epidemiological investigation by a local health department and an environmental investigation by either the LHD or code official is triggered by a report of a child's elevated blood lead level equal to or greater than 20 mcg/dL. It is important to note, that 20 mcg/dL is the state-mandated blood lead level, which then requires health departments or code enforcement officials to conduct an inspection. A town's municipal ordinance or building code may have stricter requirements with lower thresholds. In addition, inspections can occur in rental properties as a result of a complaint by a tenant or at unit turnover. Inspection data are kept by DPH, but the data do not include the reasons for inspections.

*Abatement requirements.* Figure III-1 shows lead abatement requirements under the most common scenario (i.e., a child has a high lead level). As depicted in the figure, if a child is tested and his or her blood lead level is under 20 mcg/dL, or the child is six years old or older, the results must be reported to the Department of Public Health, but no further action is required. However, if the blood lead level is 20 mcg/dL or greater, and the child is under the age of six, then the law requires an epidemiological investigation and an inspection of the child's residence. The inspection includes testing representative samples of walls, floors, windows, exterior surfaces, and soil for lead content. If no lead is found, no action is required by the property owner, but the local health department will try to determine other sources of lead exposure.

Under current regulations, if lead is found, the local code enforcement agency must issue an order to the property owner to correct all defective lead-based surfaces requiring abatement and all soil areas identified as a source, or potential source for elevated blood levels. The regulations require an owner who has been issued an order to carry out all of the following:

- abate all defective lead-based surfaces when a child under the age of six resides in a dwelling unit;
- abate all defective exterior surfaces and all defective surfaces in common areas containing toxic levels when a child under the age of six resides in a dwelling;
- abate all lead-based chewable surfaces, whether or not that surface is defective, and all lead-based movable parts of windows and surfaces that rub against movable parts of windows when a child under the age of six has an elevated blood lead level;
- abate any soil around the dwelling found to be a source of lead;
- adequately manage all intact surfaces containing toxic levels of lead, which will remain and not be abated at the time; and

Figure III-1. Lead Abatement Requirements for Property Owners in Connecticut.



Source of data: DPH Lead Poisoning Prevention and Control Regulations.

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- post a notice of toxic levels of lead on each entrance to the dwelling unit or common area of the dwelling if affected, with the notice to remain until proper abatement and clearance is completed.

In addition, if the building is multi-family, the inspector must determine if any other children under the age of six live in the building, identify the units, and conduct an inspection. If no lead is found in those units, no further action is required by the property owner. However, if lead is found in any of those units, regardless of the blood lead level of the child, the property owner must abate *all* defective lead-based surfaces in the units, lead-based exterior surfaces, and common area surfaces. The reason for this is because defective lead is a potential source of lead poisoning for the children residing in those units. The soil is also tested for harmful levels of lead, and if found, it also must be abated.

**Relocation.** Finally, if a local director of health determines lead hazards will not be abated within a reasonable time frame and continued exposure will harm a child, the local health director is directed to use community resources to relocate the family. It is important to note, the director has the authority to permit occupancy in the unit during abatement, if such occupancy would not threaten the health and well-being of the occupants.

The regulations establish specific time frames for inspections, submission of management and abatement plans by the property owner, and abatement work to begin, once an order is issued. The time frames differ based on whether the inspection is a result of an elevated blood lead level report (Appendix F) or for another reason (Appendix G). The requirements include:

- the local health department or code enforcement agency has five working days to inspect a dwelling as a result of an elevated blood lead level and 30 days to inspect other dwellings where children reside, if an elevated BLL child has been identified in a multi-unit building;
- a property owner must submit a written lead abatement plan to the director of the local health department within 15 working days of receipt of an order. Abatement shall begin only after the director has received and accepted a plan in compliance with the regulations;
- a property owner must prepare a lead management plan addressing intact lead-based surfaces, which will remain and not be abated at the time. The management plan must be prepared within 60 working days of the date that inspection results were received. This plan, and responsibility for compliance, is transferred with ownership upon transfer of title; and
- abatement must be initiated within 45 working days in dwellings where a child with an elevated blood lead level resides, and 90 days in dwellings where children with non-elevated blood lead levels reside.

The local health director has the authority to shorten any time frames stated in regulation. In addition, the regulations require the property owner to provide a summary report of the inspection and/or abatement plan and the post-abatement inspection to tenants.

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**Older dwellings.** When a dwelling unit is 50 years or older and requires lead abatement, the owner must deliver a copy of the inspection report and a good quality photograph of the property to the Connecticut Historical Commission within five working days of receipt of an order. The commission has 10 days to certify whether the property is historic in order to provide guidance as to which lead abatement techniques are appropriate for historic properties.

### **Proposed Regulations**

As noted above, the existing regulations were adopted in 1992 and were the first comprehensive statewide regulations to address lead prevention and abatement. In 1996, due to perceived shortcomings, the department formed a broad-based work group to review the regulations and recommend revisions. Several groups were represented on the work group, including: medical providers; municipal associations; housing officials; realtors; bankers; and property owners. The work group first met in October 1996.

The work group presented a report to the commissioner in April 1997 containing several significant changes to the regulations. The recommendations were based on a work group consensus. Although each stakeholder group had specific concerns addressed by various modifications, the proposed modifications were not entirely consistent with any one viewpoint.

The Department of Public Health reviewed the proposed recommendations and drafted a proposal to amend the existing regulations. The proposal was presented at a public hearing held by the department on November 16, 1997. Following the hearing, the proposal was revised with minor changes and submitted to the Legislative Regulation Review Committee. The committee rejected the proposal without prejudice in June 1998. Objections to the proposed regulations had been raised by the Connecticut Association of Realtors, the Home Builders Association of Connecticut, and the Connecticut Property Owners Association.

A meeting was held with representatives of the above groups, DPH, and Representatives Arthur O'Neill and Alex Knopp in January 1999 to discuss the status of the proposed regulations. Representative O'Neill requested the groups with concerns meet, identify one or two items of greatest concern, and report back. For a list of the objections, see Appendix H.

Subsequently, the program review committee voted to undertake a study of Residential Lead Abatement. As a result, the department decided not to resubmit regulatory changes to the Legislative Regulation Review Committee until the program review committee study was completed.

The most significant changes between the existing and proposed regulations are shown in Table III-I. A noteworthy difference between the current and proposed regulations is the establishment of a third paint classification. – “deteriorated fair” paint. Under the current regulation, only two classifications exist, and if paint is classified as “defective,” abatement is required. Under the proposed regulation, paint classified in “deteriorated fair” condition can be repaired rather than abated, which is a less costly alternative.

<b>Table III-1. Comparison of Existing and Proposed Regulations.</b>	
<i>Existing</i>	<i>Proposed</i>
Two paint classifications: intact or deteriorated	Three paint classifications: intact, deteriorated fair, and deteriorated poor
Abate defective components that contain lead-based paint	Require repair for paint in fair condition and abatement for deteriorated components in poor condition
Local health departments (LHD) initiate investigation within 5 days if child has elevated BLL	LHD conduct visual examination within 3 business days if child has an elevated BLL of 35 mcg/dL or greater
Encapsulants are incorrectly addressed within another section of regulations	Use of encapsulants appropriately addressed within encapsulation section of regulations
Interim controls are not addressed	Interim controls are allowed temporarily to reduce lead-based paint hazards
Written notice to residents only, within 5 days prior to the start of abatement	Written notice to LDH, DPH commissioner, and residents 5 days prior to start of abatement
Intact lead-based paint on chewable surfaces if child has an elevated BLL	Discretion provided to LHD to permit intact chewable surfaces to be covered in a management plan
If abatement does not occur within a reasonable time frame, LHD directed to use available community resources to relocate family; LHD may permit occupancy in unit during abatement if occupancy would not threaten health and well-being of occupants	Requires residents be relocated during abatement unless local health director specifically permits occupancy, which must be stated in the abatement plan; criteria to permit occupancy must include: abatement of limited scope, access to work area adequately restricted, and lead dust contained
Source of data: DPH proposed regulations.	

Under the proposed regulations, discretion is also given to directors of local health departments to permit intact chewable surfaces (such as window sills, baseboards, and trim) to be placed in a management plan, rather than abated, if a child has an elevated blood lead level equal to or greater than 20 mcg/dL. Finally, the requirements on whether a family must be relocated during abatement are somewhat vague under current statutes (i.e., if abatement will not be completed in a reasonable time frame). The proposed regulations require the local health director explicitly permit occupancy, but set out conditions that must be met before such permission is allowed.

**Hazardous Materials Program.** Public Act 87-541 established the Hazardous Materials Program, housed at the Department of Economic and Community Development. The program was to provide funding for eligible developers, community housing development corporations, or any other person approved by the commissioner to obtain state financial assistance for lead abatement or asbestos removal. In actuality, the program has been operated as a consumer-oriented loan/grant program for property owners who have been issued orders by local health departments to abate lead or remove asbestos. The administration of this program is described in greater detail in the next chapter.

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## Other Lead Laws

**Consumer protection.** There are several other laws that protect consumers from the hazards of lead paint. Laws requiring licensing and certification of lead contractors and workers are aimed at ensuring proper abatement methods are used when a consumer contracts for that work to be done. Similar to the federal law, state law requires property owners or their agents, at the time of sale, to disclose known lead hazards.

Several laws also govern tenant/landlord relations and require landlords to: comply with all applicable building and housing codes; make all repairs and do whatever is necessary to keep the premises in a fit and habitable condition; and keep all common areas clean and safe. If landlords fail to comply with these conditions, by statute, tenants do not have to pay rent. In addition, the law requires in certain rental housing that paint on accessible surfaces not be chipped, blistered, flaking, loose, or peeling so as to constitute a health threat. Tenants also have responsibilities including: complying with applicable building, housing, or fire codes affecting health and safety; and keeping the premises that he or she occupies clean and safe.

**Screening.** Each local or regional board of education also has the authority to require a child's blood lead levels be tested prior to public school enrollment. Lead screening is mandated for children entering Head Start programs.

**Compliance with orders.** There are no enforcement penalties specific to Connecticut's lead laws. Rather, local health departments and building code officials are given authority to issue orders to enforce the Public Health Code. If these orders are not complied with under C.G.S. §19a-206, the statute provides for health directors to institute a civil action for injunctive relief in any court. Noncompliant property owners are also subject to a civil penalty of \$250 per day. In addition, C.G.S. §19a-220 provides for a Superior Court judge to issue a warrant requiring the noncompliant individual to carry out the order. Another statute, C.G.S. §19a-230 provides for fines and penalties for any person who violates any legal order of a director of health, with fines of \$100 or imprisonment of not more than three months or both. Furthermore, other sections of the statute provide for civil penalties if landlords fail to maintain their properties.

## Summary

Connecticut's law focuses on ensuring housing is free of lead hazards. Beyond reporting screening results to the Department of Public Health, no other state mandates exist to ensure children are identified and, if found lead-poisoned, treated. The state performs primarily an oversight role with **no direct** responsibility for administering Connecticut's lead law. Rather, local health departments/districts are the entities required to carry out investigations and ensure compliance with any orders issued.



### State Organization, Resources, and Programs

The Department of Public Health has primary responsibility for lead prevention activities and oversight of enforcement actions conducted by local health department and code enforcement agencies. The Department of Economic and Community Development, the lead agency for housing programs, offers consumer loan/grant programs that private property owners may use to abate lead hazards. This chapter describes the role of these agencies in administering Connecticut's lead prevention and abatement laws.

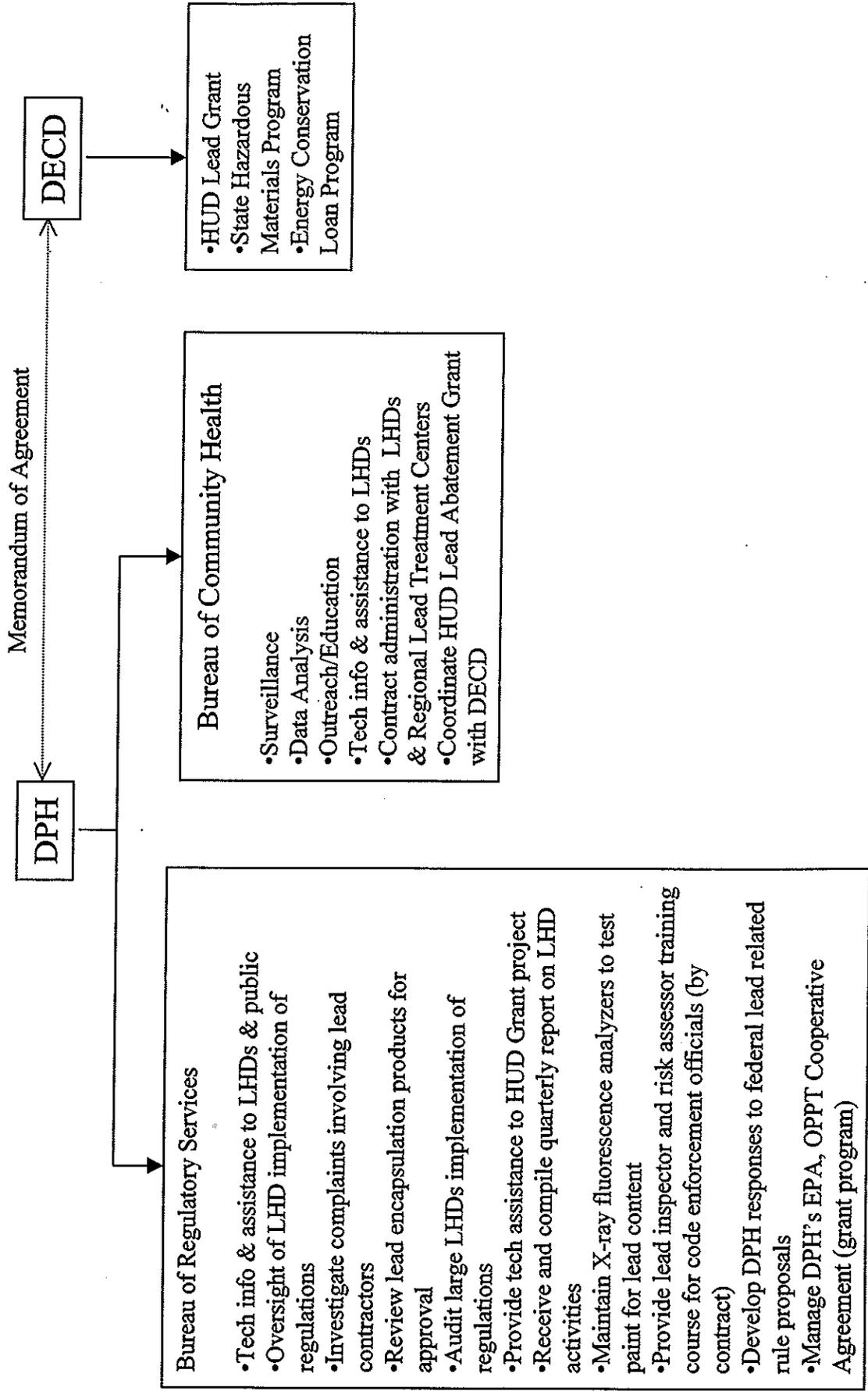
#### Department of Public Health

The Department of Public Health is the lead agency for the state's Childhood Lead Poisoning Prevention Program (CLPPP). The organizational structure for the program is depicted in Figure IV-1. As the figure shows, no single division is responsible for all lead prevention activities. Rather, various aspects of the program are split among the department's three bureaus. As shown in the figure, the department performs five major activities:

- education and outreach;
- testing of blood lead levels and analysis of paint and dust samples through the state laboratory to determine if lead is present;
- surveillance of the target population through the Environmental Epidemiology and Occupational Health Division (EEOH);
- oversight of the local health department's enforcement of the lead laws and regulations by the Lead Environmental Management Unit; and
- licensing and certification of all lead contractors, and personnel.

In addition, Figure IV-1 shows the relationship between DPH and the DECD in overseeing the administration of state and federal funds used to assist property owners in abating lead hazards from their properties. The Department of Economic and Community Development has primary responsibility for this program and those activities are discussed later in this chapter. Selected activities of DPH are described in more detail below.

34 Figure IV-1. State Organization for Lead Prevention Program.



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**Environmental Epidemiology and Occupational Health Division.** This division, organized into three program units, is located under the Bureau of Community Health. Two of the units, the Childhood Lead Poisoning Prevention Program and the Occupational Health and Special Projects (OHSP) are responsible for lead prevention activities. The Childhood Lead Poisoning Prevention Program:

- maintains lead databases and reports quarterly to the CDC ;
- conducts surveillance for childhood lead exposure;
- performs primary (community outreach and education activities and professional education for providers) and secondary (oversight of screening, case management, and follow-up) prevention activities; and
- oversees:
  - selected epidemiological investigations by local health departments;
  - treatment by regional lead treatment centers of lead-poisoned children in selected cases – those with blood lead levels greater than 35 mcg/dL; and
  - contracts with eight local health departments to operate lead programs and the state’s two Regional Lead Treatment Centers.

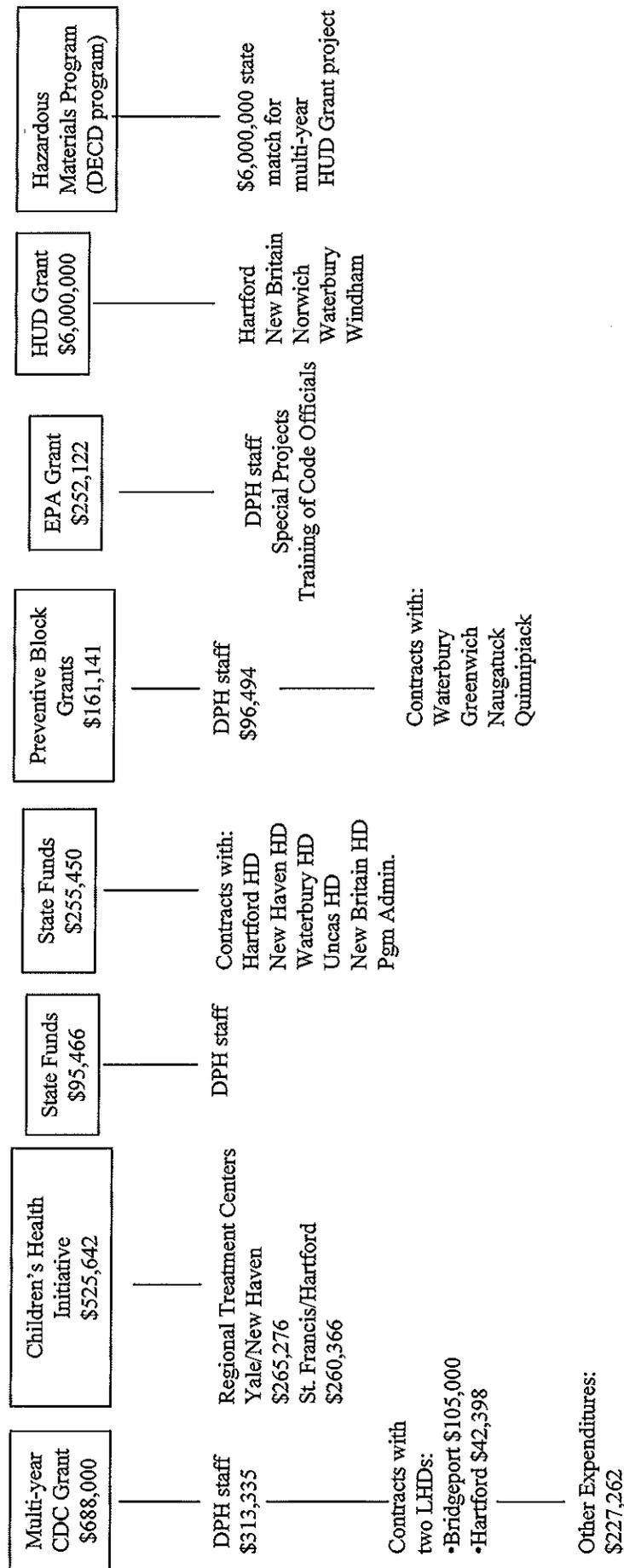
In addition, the department’s Occupational Health and Special Projects Unit conducts surveillance for occupational diseases and adult lead-poisoning; and coordinates with DECD for the HUD lead abatement project.

**Lead Environmental Management Unit.** The Lead Environmental Management Unit (LEMU), located in the Division of Environmental Health, Bureau of Regulatory Services, has primary responsibility for overseeing lead inspections carried out by local health departments. The unit also is responsible for:

- analysis of quarterly lead reports submitted by LHDs required by statute;
- investigation of complaints involving lead-related issues and activities, including those that involve licensed lead contractors and certified lead abatement personnel and consultants;
- review and authorization of lead encapsulation products for use and overseeing their use;
- conducting audits of the larger local health departments;
- maintaining seven X-ray fluorescence analyzers, which are available to trained local health department staff for testing paint for lead content;
- developing department responses to federal lead related rule proposals; and
- managing the grant from EPA’s Office of Pollution, Prevention, and Toxics, which provides for a licensing and certification program for lead consultants, contractors, and workers.

**Resources.** The childhood lead program receives several federal grants to use for a variety of purposes. Figure IV-2 shows the funding source, appropriated amounts, and distribution of funds for 1998. Altogether, the lead poisoning prevention program received \$1.1

Figure IV-2. FY 98 Funding for the Childhood Lead Poisoning Prevention Program.



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million in federal funds, with an additional \$6 million in HUD funds. Federal funds are used to pay DPH staff salaries, provide grants to local health departments to operate lead programs, and to operate a licensing and certification program for lead abatement contractors, consultants, and workers. State funds accounted for \$876,558 and were used to support the two regional lead treatment centers, DPH staff salaries, and some local programs.

**Activities of the Department of Public Health.** Selected highlights of EEOH and LEMU activities are provided below. It is important to note, however, a major activity of EEOH is collecting and analyzing screening data, which was already described in Chapter One.

*Education.* Education and outreach are major activities of the state's lead program and may be conducted directly by DPH or through local health districts. Responsibilities for education and outreach are shared between EEOH's Childhood Lead Poisoning Prevention Program and LEMU. Generally, outreach and education are targeted to four groups with LEMU responsible for providing information about interim controls and proper abatement methods, and the CLPPP responsible for screening and medical management information. The four groups include:

- families receiving outreach and education about lead hazards, interim controls, and the importance of screening high-risk children;
- health professionals receiving guidelines on screening, case management and treatment, and education on lead hazards;
- local health departments receiving a package of prepared responses from the Childhood Lead Program, which may be used to inform property owners of their responsibilities, and educational material to give to parents when a child is identified with a BLL equal to or greater than 10 mcg/dL; and
- home remodelers, the focus of recent DPH educational efforts through a lead awareness campaign at local hardware and paint stores.

The CLPPP recently issued a Comprehensive Guide on Prevention and Treatment, in written format. The guide contains a wealth of information on screening, medical management of children with elevated BLLs, responsibilities of local health departments, and advice for parents on how to reduce the risk of lead exposure in their environment. Distribution of the guide is targeted to a wide audience including health professionals, social workers, and local health departments and code enforcement officials.

*Oversight of environmental investigations and enforcement.* The lead prevention program maintains two methods for tracking childhood lead poisoning cases. First, the Surveillance Unit of the program maintains the Lead Surveillance System, which contains information from screening reports from clinical laboratories and medical care providers. The Lead Management Unit receives and compiles the statutorily required quarterly lead reports from local health departments and districts. These reports track lead inspection and abatement activities within each local health department or district. LEMU updates its records as each quarterly report is received and compiles them into an annual summary. Currently the two

tracking databases are separate, and a third database for CDC required reporting is also maintained.

There are 108 health districts in Connecticut. Although statutorily required to submit quarterly reports, only 327 of the 432 required number were received by LEMU from health departments/districts in FY 98. Table IV-1 compares the reporting distribution for FY 97 and FY 98, and as the results show, while compliance is basically good, some districts' reporting are spotty.

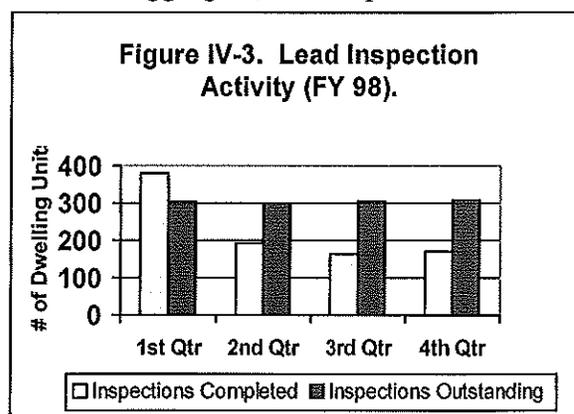
<i>Number of Reports</i>	<i>FY 97</i>	<i>FY 98</i>
Reported all 4 quarters	58%	62%
Reported 3 quarters	18%	12%
Reported 2 quarters	6%	4%
Reported 1 quarter	7%	9%
No Reports Received	11%	14%
Total	100%	101%*

Adds to more than 100% due to rounding.  
Source: DPH.

In FY 98, 15 local health departments (14 percent) did not submit any quarterly report, while 93 submitted at least one during the year. In addition, 68 of the 108 LHDs indicated they had received no clinical reports of any children with an elevated blood level equal to or exceeding 20mg/dL during that quarter. Of those 68 LHDs, 46 reported for all four quarters.

The program review committee found the database responsible for tracking local inspection and abatement activities contained several limitations. First, the data are self-reported by health departments/districts and are not audited by LEMU. Therefore, it is unknown if towns that did not report for all four quarters did not have any lead inspections, or they just went unreported. Second, discrepancies existed in the database between the number of inspections that identified lead hazards and the number of properties requiring abatement. Third, screening data maintained by EEOH could not be matched with LEMU inspection and order data, since individual names and addresses are not reported to LEMU. Finally, since health departments or districts report on inspection and abatement activities in the aggregate, it is impossible to know the length of time it takes for an inspection to be conducted and if lead is found, for abatement to be completed. Therefore, an inspection or abatement outstanding in one quarter may continue to be outstanding without DPH being aware of it. The database, however, does provide a broad overview of lead activity and identifies towns that perform a large number of inspections and issue most abatement orders.

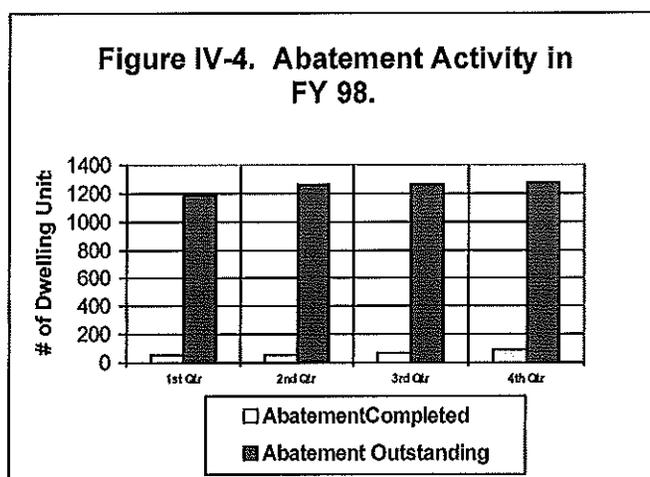
Figure IV-3 shows the number of lead inspections completed and outstanding as



reported by the 95 local health departments and districts for FY 98 by quarter. An outstanding lead inspection is one where the residence has a child with a blood lead level equal to or greater than 20 mcg/dL, but the lead inspection of the dwelling has not yet been completed. There were a total of 903 inspections completed in FY 98. The greatest number (379) were completed in the first quarter of FY 98. The number of inspections decreased significantly to 192 in the second quarter and then stabilized at that level in subsequent quarters, with 161 inspections in the third quarter and 171 in the last. One possible reason for the high number of inspections in the first quarter of FY 98 (7/1/98 – 9/30/98) is because more children are identified with elevated blood lead levels in the summer because of increased access to exterior porches (a common source of chipping lead paint) and lead dust created from opening and closing windows.

Figure IV-3 also shows the number of inspections that remain outstanding is fairly constant from quarter to quarter. There were 302 inspections outstanding in the first quarter of FY 98 and 306 in the last quarter.

LEMU also gathers aggregate information on the number of abatements outstanding and completed for each quarter (shown in Figure IV-4). During FY 98, a total of 275 abatements were completed, only about 23 percent of the approximately 1,200 abatements orders outstanding throughout the year. The number outstanding increased 8 percent from the first quarter (1,183) to the last (1,272).



**Greatest activity.** Six of the states largest local health departments (Bridgeport, Hartford, New Britain, New Haven, Norwalk, and Waterbury) supplied complete information reports for all quarters of FY 98. Report highlights included:

- the six LHDs completed 829 inspections and reported 919 new dwelling units requiring inspection
- 336 of the inspected dwelling units (41 percent) contained lead hazards;
- 493 of the inspected dwelling units (60 percent) identified no lead hazards; and
- 228 abatements (83 percent) were reported complete, out of a total of 275 completed statewide.

**Licensing and certification of lead personnel.** Through March 31, 1999, the department had issued 272 licenses to lead abatement and consultant contractors and 1,620 certificates to personnel in the five lead abatement and consulting disciplines. Additionally, 373 license renewals and 1,291 certificate renewals had been issued as of that date.

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**Summary.** The Department of Public Health conducts a variety of activities in order to implement Connecticut's lead law. Two of the department's major responsibilities are split between different bureaus – one responsible for lead prevention activities; the other for regulatory oversight of inspections and abatements carried out by local health departments. As a result of the organizational structure, the program review committee found separate databases are maintained by the two bureaus – one to track lead screening in children; the other to track lead inspections and compliance with abatement orders.

Better information is needed by LEMU to oversee the regulatory requirements of the state's lead law. Self-reported data submitted from municipalities on lead inspections and abatements are provided in the aggregate, and therefore, individual properties cannot be tracked by LEMU to determine their inspection and abatement status. As a result, department staff was unable to resolve discrepancies identified by the program review committee in FY 98 data between the number of units inspected identified with lead hazards and the number of abatement orders issued.

### **Department of Economic and Community Development**

The Department of Economic and Community Development is the state's lead agency for housing related matters. The department administers state housing programs for citizens with low and moderate incomes, coordinates federal housing and community development programs, and develops and implements state housing policy. Although DECD offers several broad programs for substantial rehabilitation of housing which may include lead abatement, this study focused on programs specifically available to individual property owners (non-developer) for lead abatement. The administration and funding of past, current, and future programs for lead abatement are discussed below.

**Hazardous Materials Program.** In 1987, the Connecticut General Assembly created the Hazardous Materials Program (C.G.S. §8-219(e)) funded with state bond money. Under this program, DECD is authorized to make loans, deferred loans, and grants to eligible developers, community housing development corporations, or any other person approved by the commissioner for lead abatement or asbestos removal. In actuality, the program has been operated as a consumer-oriented loan/grant program for property owners who have been issued orders by local health departments to abate lead or remove asbestos from residential dwelling units.

*Program criteria:* Under the program regulations, the amount of state financial assistance cannot exceed 100 percent of the total cost of the abatement or technical assistance. DECD may provide loans to any owner of housing where a lead-based paint hazard exists, regardless of the income of the owner or the tenant. Upon application, a property owner must show that a lead-based paint hazard is present in the unit and evidence of an approved abatement plan by the director of the local health department. The regulations require priority be given to:

- families with children having an elevated blood lead level; and
- owners of units containing lead-based paint hazards that are occupied by low- and moderate-income families (incomes at or below 100 percent of state or area median).

The program's priorities are addressed in two ways: through the allocation of available funds and through the terms of the loan. Grant and loan terms established under the program are shown in Table IV-2.

<b>Table IV-2. Type of financing provided under the Hazardous Materials Program.</b>		
<i>Category of Family Income As % of Area Median Income</i>	<i>Type of Financing</i>	<i>Term</i>
0-80 %	Grant	10 years*
81-100%	0% loan	15 years
101-150%	1% loan	15 years
151-200%	3% loan	15 years
201% and up	6% loan	15 years
*property lien Source: Regulations, Conn. State Agencies, §8-219(e)-4a.		

Eligible borrowers qualify for financial assistance on a unit-by-unit basis, based on the category of the resident family's income as a percentage of Area Median Income (as defined by the U.S. Department of Housing and Urban Development). For median incomes exceeding 200 percent, property owners must show proof they sought a loan from a lending institution, but were rejected.

All loans to owners of rental property occupied by low- and moderate-income families carry a restriction prohibiting an increase in rental charges to cover loan payments. All loans are subject to immediate repayment, if the property is sold prior to the end of the loan term. If a grant is given, the grant amount is subject to a lien, which is decreased by 10 percent each year, until the 10<sup>th</sup> year when the lien is released. Finally, owners participating in the program must agree to continue to rent abated units to low- and moderate-income tenants for at least five years.

**Funding.** The state's Hazardous Materials Program is funded through the sale of bonds, supplemented by a variety of federal funding sources. Since the program's inception, the bond commission has allocated about \$9.6 million, although not all of that amount has yet been expended. Total state Hazardous Materials and federal expenditures as of June 30, 1999 for lead abatement have been slightly more than \$6.2 million and \$5.3 million respectively. The Housing and Community Development program has provided an additional \$1.1 million in funding. The program has resulted in lead being abated in 722 dwelling units.

Until 1995, DECD directly administered the Hazardous Materials program. According to the department, under its administration, 340 units were abated and total expenditures were \$2,428,755, for an average lead abatement cost of \$7,143 per unit. DECD discontinued direct administration of the program when the department received a \$6 million grant from HUD to abate lead and contracted with five high-risk municipalities to administer lead programs in their towns. In addition, the department entered into a \$2.7 million contract in 1995 with the Connecticut Association for Community Action (CAFCA) to administer a lead abatement/rehabilitation program using some of the state Hazardous Materials Program funding and HOME funding. HOME is a federal housing program that provides funding to states to develop and support affordable housing. Both programs are described below.

**Connecticut Association for Community Action Program.** In 1995, the Connecticut Association for Community Action received \$1,424,489 in federal HOME funds and \$745,000 in state Hazardous Material funds for lead abatement in conjunction with the rehabilitation of rental units for low- and moderate-income households. Although the money was committed in 1995, actual abatement projects did not begin until 1996. The program was short-lived; the last project began on May 13, 1998, and no more applications are being accepted. Table IV-3 shows the CAFCA program funding allocated by expenditure category.

<i>Category</i>	<i>HOME Funds</i>	<i>State Bond</i>	<i>Total</i>
Administration	\$140,000	\$0	\$140,000
Direct Project	\$1,284,489	\$600,000	\$1,884,489
Training/Tech Assist.	\$0	\$145,000	\$145,000
Total	\$1,424,489	\$745,000	\$2,169,489

Source: CAFCA.

Although CAFCA did not track dollars spent on rehabilitation versus lead abatement, there was a per-unit cap of \$4,000 for all rehabilitation. Hypothetically, since rehabilitation was also a program goal, if each unit received the maximum dollar amount allowed for rehabilitation, the average lead abatement cost per unit would have been \$15,230. To date, project expenditures are \$1,561,567; however, some projects still have expenditures outstanding.

The program completed abatement on 98 units throughout the state. Almost all property owners received grants to abate lead with only two owners receiving a combined grant and partial loan. Table IV-4 shows the location of the properties and the number of units abated by municipality. The city of Hartford had the most units abated under the program, followed by the city of Waterbury.

<i>Town</i>	<i>Units</i>
Coventry	1
Danielson	2
Durham	1
East Hartford	2
Jewett City	2
Hartford	52
Meriden	2
Moosup	2
Norwich	4
Putnam	5
Southington	3
Plainfield	2
Waterbury	19
Willimantic	1
Total	98

Source: CAFCA.

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**HUD Lead-Based Paint Abatement Grant Program.** The second program that combines state Hazardous Materials money with federal funds became available in 1996. Under Title X of the Housing and Community Development Act, the Department of Housing and Urban Development is authorized to provide grants to states and municipalities to operate lead abatement programs for private property owners. The state of Connecticut, through a joint effort by the then Department of Housing and the Department of Public Health and Addiction Services (DPHAS), received a \$6 million grant award in 1995 under HUD's Lead-Based Paint Abatement Grant Program. The state augmented the HUD grant with a \$6 million contribution from the Hazardous Materials Program and \$2.4 million from the Housing and Community Development program. As part of the grant requirement, the five participating municipalities budgeted an additional \$1,866,102 of cash and in-kind services.

As a result of the HUD grant, major changes in the state's administration of the Hazardous Materials Program occurred. Using a risk index developed by DPHAS, based on: age of housing stock; number of children below age five; and the percentage of those children below the poverty level, the state identified the towns at highest risk for childhood lead poisoning. Federal HUD and state Hazardous Materials funds were made available only to the five municipalities with the highest-risk and interested in participating in the program: Hartford, New Britain, Norwich, Waterbury, and Windham.

*Program goals.* In its 1994 grant application to HUD, the Department of Housing projected abatement and relocation costs of \$13,100 per unit thereby estimating 700 units (140 per municipality) could be abated under the grant/low interest loan finance program. In addition, the grant was to fund abatement activities to:

- establish 24 lead-safe houses;
- provide screening and case management for lead-poisoned children;
- conduct community education;
- develop and maintain a registry of "lead-safe" and "lead-free properties"; and
- monitor the health status of abatement and inspection personnel.

Under the HUD grant, data collection, inspections, abatement, education, outreach and administration could be funded. However, funds allocated to the state's Hazardous Materials Program could only be used for lead abatement.

Responsibility for grant administration was divided between the then DECD and DPHAS. Through a Memorandum of Agreement, the Department of Economic and Community Development assumed responsibility for all fiscal administration and issues that generally fall within the expertise and jurisdiction of DECD. The Department of Public Health's responsibilities include oversight and coordination of all public health aspects of program implementation -- screening and case management, risk reduction education, environmental follow-up and abatement guidance, as well as data management and analysis.

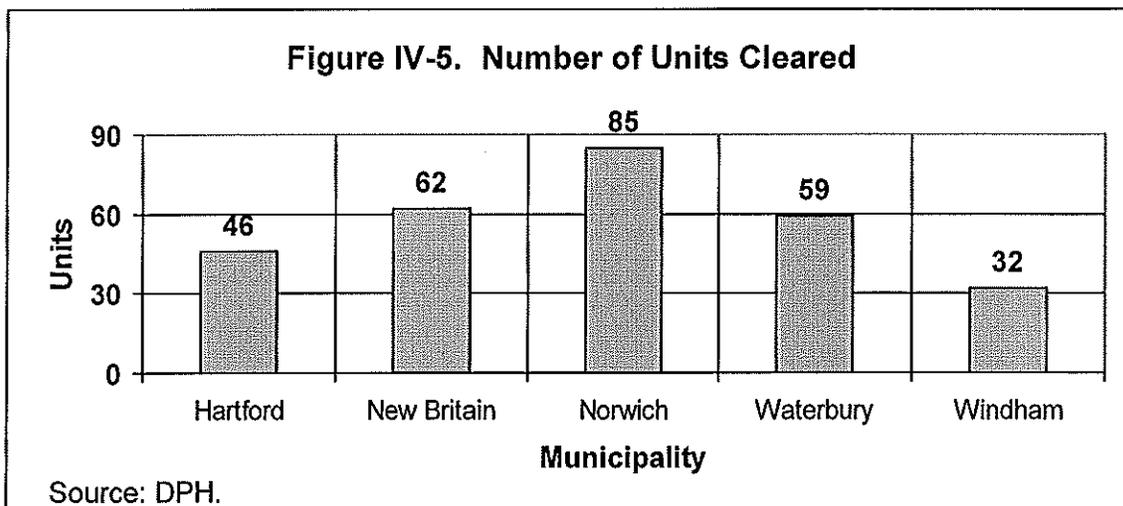
*Program design.* Each municipality selected to participate in the grant program was given broad latitude to design its own lead program including resource coordination, policies on temporary relocation, recruitment of property owners, educational campaigns, medical and social

service referral systems, and selection of abatement contractors. Also, each municipality determined how to provide case management and environmental professional services (i.e., hire new staff, subcontract, or use existing staff).

Although the state received the grant in March 1995, contracts with the towns were not signed until January 1, 1996, because regulations requiring lead abatement consultants and workers be licensed or certified were not in place until November 1995. This, along with the decentralized program design and voluminous federal reporting requirements, resulted in a noticeable lack of progress. By June 27, 1997, only 13 units had been cleared (i.e., abatement had been completed, reinspected, and no lead hazards found).

As a result, HUD reviewed the program and streamlined reporting requirements in 1998. In addition, HUD permitted DECD to decrease the original goal of lead hazard abatement in 700 units (140 in each municipality) to 610 units. In addition, the grant received three extensions. It was originally supposed to be completed by March 1998, but it is now scheduled to end in June 2000.

*Abatements.* Figure IV-5 shows the number of units that have been cleared in each town as of June 30, 1999. A total of 284 units have been given clearance during the four-year period the program has been operational. (HUD has allowed the state to count an additional 101 units abated with state funds toward the required federal match even though they were not part of the HUD program, but these units are not included in the figure). As depicted, Norwich had the greatest number of units cleared (85) and Windham the least (32).



*Costs.* Table IV-5 shows financial data maintained by DPH on 322 lead abated units under the HUD program. Included in the table are units that have not received final clearance. Also depicted in the table is the amount of dollars spent on rehabilitation other than lead abatement. The HUD grant program allows funds to be used for modest rehabilitation (such as patching a leaky roof), but to ensure the viability of lead hazard reduction activities, grant funds cannot be used to carry out major rehabilitation. According to the table, 212 of the 322 units (66

percent) abated also needed some other type of rehabilitation. This ranged from 29 percent of the units in Waterbury to 97 percent in Norwich.

**Table IV-5. Expenditures of the HUD Lead-Based Paint Hazard Control Program.**

<i>Town</i>	<i># of Units</i>		<i>Amounts Expended</i>		<i>Unit Average Cost</i>		<i>Total Cost</i>
	<i>Lead</i>	<i>Rehab</i>	<i>Lead</i>	<i>Rehab</i>	<i>Lead</i>	<i>Rehab</i>	
Hartford	27	20	\$368,931	\$108,123	\$13,664	\$5,406	\$477,054
New Britain	59	57	\$815,544	\$322,423	\$13,823	\$5,657	\$1,137,967
Norwich	86	76	\$952,782	\$152,954	\$11,079	\$2,013	\$1,105,736
Waterbury	118	35	\$1,586,720	\$344,213	\$13,447	\$9,835	\$1,930,933
Windham	32	24	\$922,548	\$292,391	\$28,830	\$12,183	\$1,214,939
Total	322	212	\$4,646,525	\$1,220,104	\$14,430	\$5,755	\$5,866,629

Source: DPH

In terms of costs, lead abatement costs ranged from \$11,079 per unit in Norwich to \$28,830 in Windham. The average cost per unit among the five municipalities was \$14,430. It is unclear why Windham's per-unit costs are more than double those of the other four municipalities. Possible reasons suggested by the Department of Public Health were that units with more bedrooms, houses with historical significance, and single family homes all increase lead abatement costs. In addition, more extensive rehabilitation may have been performed.

Table IV-6 shows the total amount budgeted and expended by funding source for lead abatement (excluding administrative costs) as of March 31, 1999. Only about 54 percent of the total amount budgeted for lead abatement has been expended. As noted above, the grant is scheduled to end in June 2000.

**Table IV-6 Federal and State Expenditures for Lead Abatement under the HUD Program as of March 31, 1999.**

<i>Funding Source</i>	<i>Budgeted Amount</i>	<i>Expenditures</i>	<i>Available Balance</i>
HUD Funds	\$4,119,355	\$2,010,725	\$2,108,630
State Hazardous Materials Program	\$6,000,000	\$2,957,629	\$3,042,371
Housing and Community Development Program	\$2,400,000	\$1,282,946	\$1,117,054
Local Cash and In-Kind**	\$1,866,102	\$1,500,854	\$365,248
Total	\$14,385,457	\$7,752,154	\$6,633,303

\*\$1,866,102 is the amount promised to HUD as a match to the federal lead grant. The actual total of local cash and in-kind is \$2,162,854

Source: Department of Economic and Community Development.

**Municipal HUD grants.** It is important to note, municipalities are eligible to apply directly for HUD's Lead-Based Paint Abatement Grant program and several in Connecticut have been awarded a grant to administer their own lead abatement program. Table IV-7 shows the grant funding rounds and the municipalities that have been awarded grants. In the most recent funding round, three of the municipalities that participated in the state-awarded HUD program described above, submitted their own grant applications, but were not selected as grantees.

<i>Grant Round</i>	<i>Grant Start-up Date</i>	<i>Amount of Award</i>	<i>Municipality</i>
Round 2	1993	\$3,000,000	New Haven
Round 3	1995	\$2,000,000 \$2,171,363	Manchester Stamford
Round 5	1998	\$2,000,000	Manchester
Round 6	1998	\$1,100,000	New London
Round 7	Awards Announced Nov. 1999	\$1,000,000 \$3,400,000	Manchester Norwich

Source: HUD.

*Round Seven HUD funding.* The Department of Economic and Community Development, in consultation with the Department of Public Health, submitted a grant application to HUD in May 1999 for the next funding cycle (Round Seven). The application requested \$4 million to conduct lead hazard control in 342 privately owned dwelling units, and would give priority to housing units of low- and very low-income families. In its grant application, DECD indicated it would change the program design from a municipal administered program to a single statewide program administered by the Community Renewal Team (CRT), a community action agency based in Hartford. However, HUD announced the awards in October 1999, and DECD was not selected as a grantee. Of the municipalities that applied for a HUD grant for this funding round (Bridgeport, East Hartford, Hartford, Manchester, New Britain, New Haven, and Norwich), only Manchester and Norwich were selected.

**Community Renewal Team Program.** The Department of Economic and Community Development contracted with CRT in June 1999 to administer several rehabilitation programs through a one-stop process for housing rehabilitation activities including:

- the Hazardous Materials Program;
- energy conservation improvements;
- septic tank system repair, removal, or enlargement; and
- senior citizen housing emergency repairs and rehabilitation projects.

Under the Hazardous Materials Program, only residential structures with six or fewer dwelling units will be eligible for lead abatement funding; commercial units are ineligible. The department intends to fund the program at \$2.5 million. In addition, total funding for lead abatement activity will be capped at \$15,000 per unit. Finally, it is DECD's intention to encourage applicants that need to replace windows because they constitute a lead hazard to apply under the Energy Conservation Loan program. Funding provided through this program would not count toward the \$15,000 cap under the Hazardous Materials program.

According to CRT, approximately 100 individuals are currently waiting for CRT's program to be funded. The vast majority of these individuals will be applicants for the Hazardous Materials Program and are in need of financing to abate lead hazards.

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## Summary

Connecticut's lead abatement program available to property owners underwent a major change in 1995 when the state received a HUD grant and targeted funding to only five municipalities. Several problems with the program design became apparent when only 13 units had received clearance by June 1997, 18 months after the program's start-up. Further, even if the program meets its revised goal abating lead in 610 units, that would mean lead abatement was performed in only 152 units each year the HUD grant was operational. Average lead abatement costs per unit are about \$15,000. Given these abatement costs and DECD's estimates of 235,748 housing units in the state that potentially contain lead hazards, \$3.5 billion would be needed to abate lead in these units.



### Findings and Recommendations

**Background.** The harmful effects of lead hazards on children have been recognized for many years. Since lead was banned in paint, gasoline, and food cans in the late 1970s, legislation at both the federal and state level has been aimed at pre-1978 housing as the major cause of lead poisoning among children today. The most common sources of exposure today are soil contaminated with lead and lead-based paint that has deteriorated into paint chips and lead dust. Lead-contaminated dust can come from lead-based paint that is chipping, flaking or deteriorated or when such paint is scraped, sanded, or disturbed during home improvement projects. Lead-contaminated dust can also be tracked into a home from exterior sources such as lead-contaminated soil as well as porches or stairs painted with lead-based paint. Children under the age of six are the focus of the legislation, since they are most vulnerable to the effects of lead.

Connecticut established a Childhood Lead Poisoning and Prevention Program (CLPPP) in 1987. Although the Department of Public Health has carried out several prevention initiatives, the major focus of Connecticut's lead law is on identifying children who are already lead-poisoned, inspecting their residences, and if lead hazards are found, requiring property owners to abate any lead considered harmful to the child. This focus, as noted in Chapter Four, has not been particularly successful in Connecticut -- especially when the high number of lead abatement orders issued to property owners are compared to the low number of actual abatements occurring -- because it is a costly and difficult law to enforce.

#### Prevention

*The program review committee believes the cornerstone of the childhood lead program should be the prevention of lead poisoning. Chapter Two describes how the federal government shifted its policy focus towards lead poisoning prevention in 1992 through the passage of landmark legislation and the recent approval of comprehensive requirements in regulation form. The intent of the committee's recommendations presented in this chapter is to provide a number of strategies for increasing prevention activities, thus lowering the number of children with elevated blood lead levels. To accomplish this, the committee finds the Department of Public Health needs to:*

- *distribute more widely educational information on the dangers of lead;*
- *establish a targeted lead screening program so children most at risk for elevated blood lead levels are identified early, provided with educational information, and interventions can*

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*be taken; and*

- *establish voluntary essential maintenance practice guidelines for rental properties that include financial incentives to encourage property owners to control and/or eliminate lead hazards.*

**Education.** Educating groups about the reasons lead hazards are dangerous to children and how to reduce their exposure to lead is a major activity of the state's lead program. Education and outreach efforts focus on four critical groups: 1) families; 2) health care professionals; 3) local health departments; and 4) home remodelers. Education and outreach is conducted directly by DPH staff, local health districts, and the Hartford and Yale Regional Lead Treatment Centers.

*The committee finds DPH has conducted several successful outreach initiatives over the past year.* These include holding quarterly lead conferences with local health departments, health professionals, and invited child advocates; publishing and distributing a Lead Newsletter; distributing a "Comprehensive Guide to Prevention and Treatment"; and providing local health departments with a packet of form letters to send to parents and landlords to ensure consistency among towns. In addition, several local health departments have had educational initiatives on lead awareness. Since the educational materials produced are very useful to a wide variety of parties, the program review committee believes DPH should provide wider access to this valuable information.

Furthermore, Connecticut General Statute §19a-111b requires the commissioner of DPH to institute an educational and publicity program informing the general public, teachers, social workers and other human services personnel, owners of residential property, and health personnel of the danger, frequency and sources of lead poisoning and the methods of preventing such poisoning. To date, most DPH education efforts have been targeted to select groups rather than the public at large. Therefore, **the program review committee recommends:**

**the Department of Public Health establish an Internet web site providing online access to its Childhood Lead Poisoning Prevention Program. At a minimum, the web site should contain Connecticut's lead laws and regulations, general information about ways to protect children from lead hazards, information on financial assistance programs available to property owners to manage and/or abate lead hazards, statistics on screening and incidence rates, and how to request further information. In addition, the department could use the site to gather information on the impact of lead poisoning on the citizens of the state.**

*The program review committee finds Connecticut is the only New England state besides Maine without a comprehensive web site devoted to the topic of lead poisoning.* A web site would widely disseminate Connecticut-specific information to many different groups and promote a greater awareness of the harmful effects of lead hazards on children. In addition, a web site could provide the names of persons within DPH or local health departments to contact for additional information on the state's lead laws, regulations, and guidelines. The site would

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also offer a conduit to the department to receive data from local agencies on the impact of lead poisoning on the population.

Finally, homeowners need to be provided with better information on the availability of state or local financing to manage and/or abate lead from their properties. Information should include the availability of financing, the name of the state or local agencies administering the programs and their phone numbers, and general eligibility criteria.

**Notification of landlords.** Under C.G.S. §19a-110(d) any child who had a lead screening test with results equal to or greater than 10 mcg/dL must be reported to the commissioner of the public health and the local director of health in the town where the child resides. The statute further requires the local health director to provide information concerning the dangers of lead poisoning, precautions used to reduce risk, and state policy regarding lead abatement to the parent or guardian of a reported child.

The program review committee believes the provision of this information is critical in educating parents on steps they need to take to minimize their child's exposure to lead hazards. Landlords would also benefit greatly from similar educational materials when a child of a tenant has a BLL equal to or greater than 10 mcg/dL. If notification were provided to landlords of tenants with elevated BLLs, it would allow the landlord to take measures that might prevent a child's blood lead level from rising, and, therefore, preclude more extensive lead abatement requirements. Therefore, **the committee recommends:**

**C.G.S. §19a-110(d) be amended to require local health departments or districts that receive a report of a child under the age of six with a blood lead level equal to or greater than 10 mcg/dL to provide the owner(s) of the property with educational materials on how to reduce lead hazards in housing. The Department of Public Health shall develop and furnish the educational materials to be provided.**

While this recommendation requires property owners be notified, it does not require any action be taken. The intent of this recommendation is to provide property owners with an opportunity to reduce a child's exposure to lead hazards through simple preventative measures, thereby reducing the possibility of a child's BLL from rising and thus triggering the resultant costly and restrictive order of lead hazard reduction.

### **Definition of Lead Poisoning**

*The program review committee finds there is a significant amount of confusion surrounding the concept of "lead poisoned."* Prior to 1991, the Centers for Disease Control (CDC) considered any child with a blood lead level equal to or greater than 25 mcg/dL to have lead poisoning. After 1991, CDC moved away from a specific definition of lead-poisoning to the term "level of concern" for individuals with a blood lead level equal to or greater than 10 mcg/dL. While this broadened the concept of lead danger, it has resulted in an imprecise determination of lead poisoning.

The issue is further complicated by the fact the Department of Public Health's Childhood Lead Prevention Program recently issued guidelines that define lead poisoning as "a venous

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blood lead level equal to or greater than 10 mcg/dL.”<sup>1</sup> Meanwhile, the regulations define an elevated blood level as 20 mcg/dL; while the statutes do not include a definition of lead poisoning.

The statutes call for the state to follow CDC guidelines for assessment of the risk of lead poisoning, screening, and treatment and follow-up care for individuals with lead poisoning, but the law does not define a blood lead level for lead poisoning. Under CDC guidelines (shown in Chapter One, Table I-1), different blood lead levels require different responses from state and local health departments. *However, the committee finds Connecticut law does not provide a clear explanation.*

Connecticut General Statutes §19a-111 requires DPH to follow guidelines issued by the CDC. Based on CDC’s 1997 guidelines, *the committee finds the statutes need to be revised to be consistent with current CDC guidelines.* Therefore, **the program review committee recommends:**

**the commissioner of public health define in regulation the terms “elevated blood lead level” and “lead-poisoning,” in conjunction with recognized professional medical groups and the Centers for Disease Control, and the responses required in accordance with guidelines issued by the Centers for Disease Control.**

**C.G.S. §19a-111 shall be amended to require an epidemiological investigation for a confirmed concentration of lead in whole blood equal to or greater than 20 mcg/dL for a single test or 15-19 mcg/dL on two tests taken at least three months apart.**

This recommendation requires DPH to explain terms that are commonly used, but are not defined in statute or regulation and, therefore, can be misconstrued. In addition, as shown in Chapter One, Table I-1 (page 5), CDC recommends an environmental investigation at blood lead levels of 20 mcg/dL or greater, or two tests at least three months apart of 15-19 mcg/dL. Thus, the recommendation revises the statutes so the level at which an epidemiological investigation is required, which includes an environmental investigation, is consistent with CDC guidelines.

## **Lead Screening**

The Centers for Disease Control issues the primary federal recommendations on screening young children for lead poisoning. The most current screening guidelines were published in November 1997 in a document called “Screening Young Children for Lead Poisoning: Guidance for State and Local Public Health Officials”. In its guidelines, CDC recognizes lead exposure is highly variable around the country, with some children at considerable risk and others at very low risk. Studies have shown children living in older housing or who are poor are at higher risk of elevated blood lead levels and need to be screened. If their blood lead levels are elevated, appropriate interventions should be taken. Not all of the

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<sup>1</sup> Connecticut Department of Public Health, “Childhood Lead Poisoning, A Comprehensive Guide to Prevention and Treatment” (April 1999), p.7.

children living where risk for lead exposure has been demonstrated to be extremely low need to be screened, thus saving valuable resources.<sup>2</sup>

To determine which children should be screened, CDC recommends state and local health departments assess local data on lead risks and develop a lead screening plan. The CDC document provides detailed guidance for state and local health departments in establishing their state lead screening plans, including advice on assessing lead risks, engaging affected constituents in the process of developing recommendations, and communicating screening recommendations clearly. Table V-1 shows the major factors that should be considered in selecting a screening recommendation.

<i>Percent of Children Ages 12-36 Months with BLLs ≥10 mcg/dL</i>	<i>Percent Housing Built Before 1950</i>	<i>Recommended Screening</i>
≥12%	----	Universal
<12%	≥27 %	Universal or Targeted (depending on data)
3-12%	<27%	Targeted
<3%	<27%	Other methods such as focused surveys, routine review of BLL lab data, and public health alerts
Unknown	≥27%	Universal
Unknown	<27%	Targeted

Source of data: CDC, Screening Young Children for Lead Poisoning, Guidance for State and Public Health Officials, November, 1997, p.50.

For states in the process of collecting information and developing plans, CDC provides an “interim policy” for use by state health departments. If states do not adopt CDC’s interim policy or develop their own plan, CDC recommends continuation of its 1991 recommendation of universal screening for all children ages six months to 72 months. If the interim policy is adopted, CDC cautions it should only be used as a short-term measure until a plan based on local data can be adopted.

*Basic interim recommendation.* CDC’s interim policy recommends child health-care providers use a blood lead test to screen all children at ages one and two, and children 36-72 months of age who have not previously been screened, if children meet one of the following criteria:

- they reside in a zip code where greater than 27 percent of the housing was built before 1950;
- they receive services from public assistance programs for the poor, such as Medicaid or the Supplemental Food Program for Women, Infants, and Children (WIC); or

<sup>2</sup> Centers for Disease Control, “Screening Young Children for Lead Poisoning: Guidance for State and Local Public Health Officials” (1997), p. 10.

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- their parent or guardian answers "yes" or "don't know" to any question in a basic personal-risk questionnaire consisting of these three questions:

1. Does your child live in or regularly visit a house built before 1950?
2. Does your child live in or regularly visit a house built before 1978 with recent or ongoing renovations or remodeling (within the last six months)?
3. Does your child have a sibling or playmate who has, or did have, lead poisoning?

CDC's 1997 screening policy sought to better identify poisoned children by devising screening recommendations based on risk factors. *The program review committee believes the state needs to identify high-risk geographic areas or populations and develop a targeted lead screening program.* Therefore, **the committee recommends:**

**the Department of Public Health adopt CDC's interim policy recommendation until the department establishes a permanent statewide health plan for lead screening. DPH shall follow the steps recommended by CDC to develop the state plan. The plan shall include:**

- data demonstrating the appropriateness of dividing the state into targeted screening areas;
- recommendations for screening by geographic area;
- dissemination of screening recommendations for each area; and
- a program evaluation component.

**A draft plan shall be submitted to the Public Health Committee for comment by January 1, 2001, and a final plan shall be adopted by June 1, 2001. The plan shall be updated biennially and revised every five years, based on the latest screening data.**

**In addition, for both the interim plan and subsequent plans, DPH shall calculate screening, incidence, and prevalence rates based on municipal birth rates for the year rather than census data.**

The goal of screening is to identify children who need individual interventions to reduce their blood lead levels. Connecticut's screening data indicate the highest incidence of lead poisoning is concentrated in urban areas, with five towns (Bridgeport, Hartford, New Haven, Waterbury, and New Britain) accounting for 76 percent of the children identified with lead levels equal to or greater than 20 mcg/dL. A targeted screening policy would center efforts in areas where they are most needed.

**Reimbursement for blood lead testing.** *The program review committee finds the vast majority of lead screens are analyzed by the state public health laboratory within DPH.* Table V-2 compares the number of lead screens analyzed by the state laboratory and private laboratories for FY 97 and FY 98. According to the Department of Public Health, the cost to the state lab is \$18 per test. The total FY 98 cost was nearly \$1 million.

The state laboratory analyzes all lead screens free of charge, even though most children are covered by either the Medicaid program, the state HUSKY program, or private insurance. Connecticut should seek third-party reimbursement for services that are a covered benefit by an individual's health plan. Connecticut General Statute §38a-535 requires mandatory coverage for preventive pediatric care and the committee believes lead screening tests would be covered under this provision.

<i>Type of Laboratory</i>	<i>FY 97</i>	<i>FY 98</i>
State Laboratory	62,717	53,763
Private Laboratory	9,934	13,540
Total	72,651	67,303
Source of data: Department of Public Health		

In addition, C.G.S. §19a-26 authorizes the commissioner of public health to establish a schedule of fees directly related to operating costs or fair market value for such laboratory services. The statute forbids the commissioner of DPH from charging local directors of health and local law enforcement agencies for laboratory services and gives the commissioner the discretion to waive charges for others if, in the determination of the commissioner, public health requires such services be furnished without charge. Given that the potential source of revenue for the state is almost \$1 million per year if insurers were charged for lead screening tests, **the program review committee recommends:**

**as authorized under C.G.S. §19a-26, the commissioner of public health shall establish a schedule of fees for lead screening analysis performed by the state laboratory. DPH shall seek reimbursement for services performed by the state laboratory from Medicaid, HUSKY, and private health insurers for lead screenings and diagnostic evaluations for lead poisoning for children under six years of age including, but not limited to, confirmatory blood lead testing. The state laboratory shall seek reimbursement beginning no later than October 1, 2001. Beginning no later that October 2, 2001, the state Department of Social Services shall pay for lead screenings and diagnostic evaluation services where a child under the age of six is eligible for medical assistance under the HUSKY plan. The Department of Public Health shall pay for lead screening and diagnostic evaluations for lead poisoning where the child is not covered by any health insurance.**

As state resources become more and more scarce, it is critical other funding sources be identified and cost containment become a critical feature of the system.

### **Essential Maintenance Practices**

As noted in the Chapter Two, the National Conference of State Legislatures (NCSL) drafted a model lead law, based on recommendations of a national task force established under Title X of the federal Housing and Community Development Act of 1992. The model law calls for the establishment of "essential maintenance practices" (EMPs) for rental property owners.

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The maintenance practices are a set of “benchmark standards” that identify the steps rental property owners need to take to control lead hazards. For well-maintained properties, which are considered low risk, a set of EMPs would apply. They are aimed at keeping paint intact and are considered low cost. The task force’s recommendation is included in the new HUD regulation as one of the seven evaluation and hazard reduction strategies for federally owned or assisted properties.

Although the program review committee believes the HUD regulation will drive much of lead hazard control since all federal housing programs will be affected, the establishment of voluntary standards in Connecticut will help property owners reduce a tenant’s risk for lead poisoning and provide rental property owners with guidance on how to ensure their properties are lead-safe. Although the employment of essential maintenance practices is strictly voluntary, **the committee recommends:**

**the commissioner of public health develop voluntary guidelines establishing essential maintenance practices in pre-1978 housing for risk reduction of lead-based paint hazards that contain toxic levels of lead as defined in §19a-111-1 (59) (A) and (B) of the Lead Poisoning Prevention and Control Regulations. In addition, the state shall initiate a tax credit program to support essential maintenance practices as well as lead abatement. The tax program – beginning in 2001 for the tax year 2001 – shall provide a tax credit on payment of state income tax to:**

- **owners of rental properties built prior to 1978 who provide written certification from a lead inspector, certified pursuant to C.G.S. §20-475 or C.G.S. §20-476, that the property is safe from lead hazards; and**
- **owners of rental properties who have abated lead in pre-1978 rental properties, have received a certificate of clearance from a certified lead inspector, and have not received public financial assistance for the abatement. To receive the certificate, the level of lead dust cannot exceed the levels defined in §19a-111-4(e)(2) of the Connecticut Lead Poisoning Prevention and Control Regulations.**

**Only residential structures with six or fewer dwelling units will be eligible for the credit. The amount of the tax credit shall be \$1,500 annually per building, up to a maximum of six buildings. Written certifications shall be submitted with the state income tax filing. Tax credits shall be on the payment of state income tax. If no state income tax is owed by the property owner, he or she shall not be eligible for a tax credit. Written certification shall be valid for a period of two years, at which time the rental property owner would be eligible to recertify.**

An emerging consensus over practical, cost-effective measures to protect children from lead hazards in their homes further emphasizes the importance of responsible property management and the need for enforceable housing quality standards. As an added incentive for

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rental property owners, the program review committee is recommending owners that implement essential maintenance practices or abate lead from their properties be eligible for a tax credit.

Massachusetts and Rhode Island both offer tax credits as an incentive to manage or abate lead in residential housing. In Massachusetts, the tax credit is up to \$1,500 for the actual cost of covering or removing lead and \$500 for implementing interim controls, which are similar to essential maintenance practices. The committee obtained data regarding the Massachusetts program. For the 1995 tax year, the last year of available data, the Massachusetts program cost about \$2.8 million in tax revenue. The committee estimates the costs would be similar in Connecticut, based on the following assumptions:

- Massachusetts has about three million tax filers, and Connecticut has about 1.2 million filers.
- Approximately 2,000 filers in Massachusetts file for the tax credit annually.
- The Massachusetts program is more restrictive than the program proposed for Connecticut.
- Therefore, since Connecticut's program would be less restrictive, the committee estimates a similar number of filers as in Massachusetts will file for the full credit in Connecticut.
- If 2,000 filers claim the \$1,500 credit, it would cost \$3 million.

The committee believes a tax credit program is good public policy. Use of credits is a relatively inexpensive way to encourage rental property owners to manage or remove lead in their rental units. As shown in Chapter Four, other financial assistance programs have spent millions of dollars to abate fewer than 1,000 units in Connecticut. This provides another way to financially support lead prevention and abatement efforts.

### **Financial Assistance**

Currently there are few programs available to assist property owners who are under an order to abate lead from housing and/or soil. As noted in Chapter Four, the Department of Economic and Community Development (DECD) had directed a 1995 HUD grant to five municipalities. As of November 3, 1999, only 421 units had received clearance out of a total goal of 700 units projected in the department's initial grant application. HUD has extended the grant time frame for the third time -- to June 2000 -- to allow the state more time to expend the grant dollars. In addition, DECD also submitted another grant application to HUD in May 1999 for \$4 million to conduct lead hazard control in 342 privately owned dwelling units. However, HUD announced the awards in October and DECD was not selected as a grantee. Further, the demand for assistance for the state-funded Hazardous Materials Program is high, with 100 individuals on the waiting list for program funding.

Thus, with the lack of HUD funding and limited state funding for lead abatement, competition among property owners for financial assistance will be fierce. The program review committee recognizes that rental property owners who have implemented Essential Maintenance Practices and have obtained a valid certification from a lead inspector may still be at risk of a lead order. If a child's blood lead level is 20 mcg/dL or above, the regulations require more

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extensive abatement occur -- defective paint, lead-based paint friction surfaces, and moveable parts of windows in the child's dwelling. The program review committee believes rental property owners who have voluntarily implemented Essential Maintenance Practices should be given an extra level of protection by receiving priority funding for lead abatement, if they do receive an abatement order. Therefore, **the committee recommends:**

**DECD amend the state Hazardous Materials Program regulations to give funding priority to rental property owners who are under a lead order and have a valid certificate from a lead inspector certified under C.G.S. §20-475 or C.G.S. §20-476 that they have met the Essential Maintenance Practices guidelines.**

As will be discussed in the next chapter, some states are exploring or have already implemented Medicaid waivers to obtain Medicaid reimbursement for lead prevention and abatement activities not typically covered under the Medicaid program. Several states have implemented case management activities under their Medicaid programs, and Rhode Island received a Medicaid waiver that provides reimbursement for window replacement in eligible units.

However, the program review committee believes receiving Medicaid reimbursement for case management activities, environment inspections, or submitting a Medicaid waiver for window replacement are complicated areas that need further exploration, including how a program would need to be designed to receive HCFA approval. In addition, Connecticut already operates a state program for window replacement under its Energy Conservation Loan Program. However, the program review committee believes the possibility of obtaining additional revenues should be pursued. Therefore, **the committee recommends:**

**the Department of Social Services explore the feasibility of extending Medicaid reimbursement for lead prevention services not currently covered and report its findings by October 1, 2000, to the public health, human services, and appropriations committees.**

The financial incentives recommended by the program review committee encourages prevention activities be implemented by rental property owners, but add focus by financially assisting property owners who abate the lead in rental units. The intent is to create lead-safe environments that minimize children's exposures.

### **State Law and Regulation**

A major policy issue at both the federal and state level is how to protect children from lead hazards while ensuring an adequate supply of moderate- and low-income housing. Lead abatement requirements can place significant financial burdens upon owners that can result in the abandonment of property. The committee recognizes thousands of property owners face sizable financial risk if a child under the age of six has a blood lead level that requires an environmental inspection. For this reason, the program review committee recommended earlier in this chapter that the state advocate and increase prevention activities so children are identified early, and low-cost strategies can be used to manage lead hazards.

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However, the committee also finds a targeted, coherent, and comprehensive regulatory program is needed to reverse the dangers of lead poisoning in children. Strong and clear regulatory action is necessary when prevention efforts are unsuccessful and a child has a high blood lead level. Local health departments must have the authority to order property owners to manage and abate lead hazards to ensure children under the age of six are protected from continued exposure. To adequately carry out its public health and safety mission, the state must also collect information concerning the nature and degree of lead in the housing stock.

**Management information systems.** To properly carry out its public health and safety responsibilities, the state must be able to identify and track the location and level of lead poisoning found in residences. The state must also combine this information with the known impact on children to adequately assess the strength of its regulatory policy. Both precise regulations and detailed information are necessary to build and maintain a successful and dynamic state lead prevention program.

As noted in Chapter Four, the lead prevention program maintains two methods for tracking childhood lead poisoning cases. First, the surveillance unit of the program maintains the lead surveillance system (LSS) as part of the Childhood Lead Poisoning Prevention Program. The system contains information on children under the age of six who have been tested for elevated blood lead levels. *However, the committee finds there are several limitations to the database. These include:*

- *the system does not distinguish between new lead poisoning cases and those carried over from a prior year;*
- *data are maintained on a calendar year basis rather than for birth cohorts and, therefore, screening rates for age-specific populations can be lower;*
- *no information is collected on children's health insurers or family income, therefore, making targeted screening more difficult; and*
- *although required by statute, race/ethnicity data are incomplete, therefore, incidence rates cannot be compared among various ethnic groups.*

Another unit in the department, the Lead Management Unit (LEMU) receives and compiles the statutorily required quarterly lead reports from local health departments and districts. These reports track lead inspection and abatement activities within each local health department or district. Currently, the LSS and the database maintained by LEMU are separate and distinct. The database used by DPH for tracking lead inspection and abatement activities within each local health department or district has limitations, some of which were identified in Chapter Four. *The program review committee finds:*

- *data are reported in aggregate, so it is impossible to know the status of a specific property, such as the length of time it takes for an inspection to be conducted and if lead is found, for abatement to be completed;*
- *discrepancies exist in the database between the number of inspections that identified lead hazards and the number of properties requiring abatement;*

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- *screening data maintained by the LSS could not be matched with LEMU inspection and order data; individual names and addresses are not reported to LEMU; and*
  - *data are self-reported by health departments/districts and are not audited.*

DPH has recognized the limitations of its databases and hired a consultant to evaluate the LSS. The consultant's report was issued in September 1999. Overall, the report found the database was inadequate, inflexible, and did not meet the needs of the department. As noted by the consultant, the system is used, or should be used, to provide statistical data regarding the geographic distribution and variance over time of high blood lead levels, monitor local health departments to ensure they are doing proper follow-up of cases, that educational materials are being disseminated, and that statutory requirements and timelines are being met. The consultant's report identified three things a system should do:

- maintain a comprehensive and accurate record of all blood lead tests statewide including demographic and geographic information;
- link the blood lead tests to identifiable individuals for both initial and follow-up screenings; and
- maintain environmental inspection and abatement information linked to individuals with elevated blood lead levels.

It concluded the LSS in its current form is inadequate in supporting the missions of public health. The program review committee cited similar shortcomings with the department's databases in Chapter Four and concur with the consultant's findings. **The committee, therefore, recommends:**

**the Department of Public Health establish a single database for its Childhood Lead Poisoning Prevention Program. The database shall have the capability of integrating case-specific screening, case management, and environmental data.**

*The committee finds there is also no system for DPH to routinely collect, aggregate, and compare the results of epidemiological investigations performed by local health departments. Although the Department of Public Health recently issued a 10-page "model" epidemiological form to the 108 health departments/districts in the state, its use is optional, and no information has to be reported. Thus, for those local health departments that are performing epidemiological investigations, the depth and breadth of the investigation varies among departments. Therefore, the committee recommends:*

**C.G.S. §19a-111 be amended to require local health departments to use a form prescribed by the Department of Public Health for epidemiological investigations. The department shall distribute the form and collect the necessary information from local health departments concerning epidemiological investigations on its web site. The department shall evaluate**

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**the results of the investigations conducted and report the results of the evaluation to the Public Health Committee by January 31, 2001.**

Information collected during the epidemiological investigation is important because it contains child-specific information. It ensures local health departments are thorough in their investigation, particularly if there are multiple sources of exposure. In addition, this information could be used by DPH for planning purposes to improve the lead program by understanding what is occurring in the community, for better target-screening, or for public education campaigns.

Both these new systems should be integrated into the department's web site that was recommended earlier in this chapter. The web site could provide the electronic conduit for the management of data from local sources as well as provide for the distribution of forms necessary to collect the data.

**Regulatory program.** In discussions with DPH and at the program review committee's October 1999 public hearing for this study, the Connecticut Property Owners Association presented testimony regarding its opposition to the proposed regulations. (See Appendix H for a list of all of their objections to the proposed regulations.) Concerns of the association included:

- *C.G.S. §19a-111 requires an epidemiological investigation be conducted upon a report of a blood lead level of 20 mcg/dL or greater. As part of the investigation, rental property owners believe the statute requires local health departments to conduct isotopic analysis to determine the source of the abnormal burden of lead in the child's body. If isotopic analysis indicates the source of the lead is not the child's residence, the property owners argue the property should not come under the statute's requirements;*
- *A provision within the proposed regulations that required a lead inspector privately hired by the property owner to report his or her findings to the local health department or district. (After the Regulation Review Committee rejected the proposed regulations, DPH revised this provision to state the local health department or district must be notified an inspection was performed, but the lead inspector would only have to furnish the lead report upon request of the health department/district); and*
- *A provision that requires residents be temporarily relocated by the owner to suitable accommodations during abatement activities, unless occupancy is specifically permitted by the local director of health and stated within the abatement plan. The rental property owners believe this provision contradicts the statute (C.G.S. §19a-111), which states the local health director may permit occupancy in said residential unit during abatement if, in his judgement, occupancy would not threaten the health and well-being of the occupants.*

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A definition of an “epidemiological investigation” contained in current regulation states the epidemiological investigation that local health departments/districts are required to perform may include isotopic analysis of lead-containing items. However, according to a memo issued by the Office of Legislative Research in 1996,

isotopic tracking is a technique for identifying the source of a material by analyzing the isotopes (atomic weights) of its component chemicals. While most lead has an atomic weight of 207 (i.e., it weighs 207 times as much as hydrogen, the lightest element) it has other isotopes with different atomic weights. Scientists can sometimes identify the source of a sample by comparing its isotopic ratios to those of a known source, such as a mine. The CDC does not believe this technique is practical to identify the source of lead poisoning because such analyses rarely produce definitive results as to the source of the lead. Due to these difficulties, HUD does not use or endorse the use of isotopic tracking to determine whether abatement is required, manage lead poisoning cases, or determine liability for such poisoning.<sup>3</sup>

Under the new HUD regulations, when deteriorated lead-based paint is found in a child’s residence, the presumption is that it is a lead hazard and a potential source of poisoning. Furthermore, no states surveyed by the program review committee conducts isotopic analysis; those states, like Connecticut, presume if a child has an elevated blood lead level, deteriorated paint is the source or potential source of the elevated level and must be managed or abated.

Based on the opinion of CDC, the new HUD regulation, and other states’ lead programs, the program review committee does not recommend isotopic analysis be performed on a child with an elevated blood lead level. However, the committee is concerned epidemiological investigations, as required under the law when a child has a blood lead level equal to or greater than 20 mcg/dL, are not being done by all local health departments. In response to questions raised at the committee’s public hearing in October, the state DPH indicated 28 percent of the 94 local health departments recently audited did not conduct epidemiological investigations. During information-gathering interviews, the committee was told anecdotally that most local health departments focus on the environmental aspects of the dwelling and do not perform the epidemiological investigation.

The department began its efforts in 1996 to achieve broad consensus on a new set of regulations that more clearly define its lead program. As noted earlier, achieving consensus has been difficult, and the new regulations have yet to be adopted. The program review committee believes several regulatory changes are necessary to more clearly define the program. These changes, however, must be considered in conjunction with improved data collection and program information. The regulatory changes, along with improvements in data collection and analysis, will provide the state with a targeted cost-effective program that is fair to all parties and protects the public’s health and well-being.

*Privately contracted lead inspections.* Connecticut General Statutes §19a-111b(3) requires any person who detects a toxic level of lead to report such findings to the commissioner.

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<sup>3</sup>Connecticut Office of Legislative Research, 96-R-0660, 1996.

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As noted above, the proposed regulations require lead inspectors privately hired by a property owner to notify the local health department/district if they are hired by a property owner to conduct an inspection. *The committee finds this requirement creates a disincentive for property owners to voluntarily inspect their properties for lead hazards.* In addition, the requirement leaves too much discretion to local health departments/districts to decide whether or not to request a lead report and creates potential for great variation among the 108 departments/districts. Therefore, **the program review committee recommends:**

**C.G.S. §19a-111b(3) be modified and section 19a-111c-3(3)(d) of the proposed regulations be clarified that reporting requirements do not apply when property owners privately hire a lead inspector to inspect their property for lead-based paint or soil.**

The program review committee believes if a property owner voluntarily hires a lead inspector to inspect his/her property for the presence of lead-based paint, it should remain a private transaction. However it is important to note, both Title X and state law requires disclosure of known LBP hazards upon sale or lease of residential property. Thus, if a property owner sells or rents the property, he/she would still be required to disclose known lead hazards to the potential buyer or tenant.

*Relocation.* Current statutes allow local health departments/districts to permit occupancy in a dwelling during abatement if occupancy would not threaten the health and well-being of the occupants. The proposed regulations require residents to be relocated during abatement unless the local health director specifically permits occupancy, which must be stated in the abatement plan. Criteria to permit occupancy must include: abatement is limited in scope; access to work area is adequately restricted; and lead dust is contained.

The committee supports this provision of the regulation. It protects a child with an elevated blood lead level by specifically requiring the local health director to use established criteria to determine if continued occupancy is safe during abatement. This provision does not preclude families from being allowed to remain in their units; it only requires an active decision by the local health department.

*The committee finds the Department of Public Health does not collect information on:*

- *the number of families relocated from their residences because of abatement orders;*
- *the reason(s) relocation was required;*
- *the length of time of the relocation;*
- *the cost of relocation; and*
- *who has borne relocation costs.*

As noted earlier, a successful regulatory program must be supported by a comprehensive database. Improvements in the department's management information system addressed in this section along with information on relocation of families are important factors for DPH's lead

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program. A key role should be played by DPH in this area to ensure application of the regulation is uniform among local health departments.

*Intact LBP surfaces.* Current regulations require all lead-based chewable surfaces, moveable part of windows, and surfaces that rub against moveable parts of windows be abated, when a child has a BLL of 20 mcg/dL or greater, even if the paint is intact. Under the proposed regulations, discretion is given to directors of local health departments to permit intact chewable surfaces (such as window sills, baseboards, and trim) to be placed in a lead management plan, rather than abated, if no teeth marks are evident. HUD's new regulation considers a chewable surface a lead-based paint hazard only if there is evidence a child under the age of six has chewed on the painted surface or there are signs of paint abrasion or damage.

The committee believes the proposal gives too much discretion to local health departments to determine whether chewable surfaces need to be managed or abated. In addition, implementation of this requirement would vary from town to town and would make compliance difficult. If a child does not exhibit mouthing behavior (i.e., young children tend to chew surfaces and put their fingers in their mouths), regulations should not require unnecessary treatments of intact lead-based paint on chewable surfaces. Therefore, **the committee recommends:**

**Section 19a-111c-2(d)(4) of the proposed regulations should be deleted and the following language be substituted: "Chewable surfaces are required to be treated only if there is evidence that a child less than six years of age has chewed on the painted surface or there is paint abrasion or damage."**

A more important factor, according to the results of research over the last 10 years cited by HUD, is the finding that lead in house dust is the most common pathway of childhood lead exposure. The measurement of the statistical relationship between levels of lead in house dust and lead in the blood of children is significant. It is important, therefore, that resources be placed where they will have the greatest impact, such as identifying and reducing lead dust where it exists.

## **Summary**

Given HUD regulations, CDC guidance, and other states' lead laws, the program review committee believes targeted prevention should be the focus of Connecticut's efforts. However, if that strategy fails, the state needs a precise and comprehensive regulatory program to protect children with elevated blood lead levels from lead hazards. As recommended earlier, allowing property owners to institute essential maintenance practices and providing notification to landlords on lead hazards before a child's blood lead level reaches an actionable level could go a long way in preventing lead poisoning. However, if prevention fails, property owners need to address lead hazards to lessen a child's exposure, and the state needs to impose the appropriate regulatory remedies.

### Other States

As part of this study, the program review committee examined lead programs in other state to compare their laws, regulations, and policies with those in Connecticut. Most states have certain key components that are an integral part of their lead programs. Those key components generally deal with the following areas: condition of housing stock; lead screening and reporting results; types of interventions; abatement requirements and enforcement orders; and financial resources. These basic program elements can be found in some form in every state's lead program.

Information was gathered via phone surveys and reviews of applicable statutes and regulations. All New England states were selected to be part of the analysis, as well as Maryland because it operates an innovative program considered a model at the national level.

### Comparative Findings

Beyond the key components, several general themes among state lead prevention programs emerged:

- governmental activities related to lead prevention and abatement funding are fragmented and multi-layered – usually housing and public health agencies are involved at the state level, as well as counties and municipalities at the regional and local levels;
- data collection on the number of children screened, public health orders issued, and the amount of federal or state financial assistance available to property owners for abatement is problematic, and the program fragmentation noted above makes program effectiveness difficult to evaluate;
- staffing and financial resources vary among states, resulting in public health orders to manage and abate lead hazards not uniformly enforced, and oversight and follow-up to ensure compliance not always performed; and
- interpretation of state lead statutes and/or regulations at the local level are often conflicting because of the decentralized nature of the program.

In addition, all states acknowledged the financial ability of property owners to comply with the law has been spotty. Therefore, orders may linger, or properties may be abandoned. As a result, many states have recently begun to

revise their programs by creating financial incentives for property owners and focusing on increasing primary prevention activities, as has been recommended in this report, to reduce children's exposure to lead hazards. This generally requires focusing on identifying and correcting only lead hazards (not all lead-based paint) and promoting the concept of a lead-safe environment. This chapter provides a comparative analysis of the states selected for review.

**Housing stock.** In order to understand the extent of the problems in abating lead from housing and the associated costs, Table VI-1 shows the number of housing units built prior to 1950 in each state -- the category of housing considered most dangerous. Connecticut's pre-1950 housing units number nearly 500,000 or almost 35 percent of the housing stock. The portion of the United State's housing stock built before 1950 is 27 percent.

<i>State</i>	<i>Total Housing Units</i>	<i>Housing Units Built Before 1950</i>	<i>Percent Built Before 1950</i>
Connecticut	1,320,850	462,808	35%
Maine	587,045	242,858	41%
Maryland	1,891,917	473,984	25%
Massachusetts	2,472,711	1,157,737	47%
New Hampshire	503,904	162,201	32%
Rhode Island	414,572	181,215	44%
Vermont	271,214	109,780	41%
Total U.S.	102,263,678	27,508,653	27%

Source of data: CDC, "Screening Young Children: Guidance for State and Local Public Health Officials," Nov. 1997, p.15.

**Housing stock targeted.** Most state's lead laws target housing built before 1978. the year lead-based paint was banned from use in the United States. Table VI-2 identifies the property year targeted by each state's law. As the table shows, all New England states target housing built prior to 1978. Maryland law focuses only on pre-1950 properties, when it is assumed almost all paint contained high contents of lead.

<i>State</i>	<i>Targeted Property</i>
Connecticut	Pre-1978 Housing
Maine	Pre-1978 Housing & Child Care Facilities
Maryland	Pre-1950 Rental Housing
Massachusetts	Pre-1978 Housing
New Hampshire	Pre-1978 Housing & Child Care Facilities
Rhode Island	Pre-1978 Housing & Child Care Facilities
Vermont	Pre-1978 Housing & Child Care Facilities

Source of data: LPR&IC telephone survey, July 1999.

**Lead screening.** Screening children under six years of age is considered critical in detecting a child's exposure to lead, since most of the signs of lead poisoning are not obvious.

Screening is conducted by using a capillary (fingerstick) or venous blood test. The committee examined state screening policies to determine if any states statutorily mandate the screening of children for lead poisoning. Table VI-3 shows each state's screening policy.

<b>Table VI-3. Lead Screening Policy</b>	
<i>State</i>	<i>Policy</i>
Connecticut	Not mandated; recommended through age 6
Maine	Not Mandated
Maryland	Mandated for children under age 6 who enter a child care facility
Massachusetts	Mandated through age 4; screen up to age 6 if high risk
New Hampshire	Not Mandated
Rhode Island	Mandated for children up to age 6
Vermont	Mandated for children at age 1
Source of data: LPR&IC telephone survey, July 1999.	

In addition, it is important to note Medicaid's Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) program mandates all Medicaid children be screened at ages one and two regardless of state policy. Four states maintain a policy similar to Medicaid by mandating lead screening at particular ages. Rhode Island and Massachusetts have the most comprehensive policies, screening children through ages six and four respectively. Maryland's policy differs slightly in that it pertains only to those children entering child-care facilities and does not include children who would be cared for at home.

**Reportable blood lead levels.** Some states mandate lead screening test results be reported to the state public health department, while others only require reporting if lead in the blood exceeds a specific level. Requiring all test results be reported provides a state with better planning information regarding the extent and geographic location of lead screening, as well as the incidence and prevalence rates of elevated blood lead levels within the population targeted. Table VI-4 shows reportable BLLs for each state examined.

<b>Table VI-4. Reportable Blood Lead Levels</b>	
<i>State</i>	<i>Blood Lead Level</i>
Connecticut	All Results
Maine	≥20 mcg/dL
Maryland	All results
Massachusetts	All Results
New Hampshire	All Results
Rhode Island	All Results
Vermont	≥10 mcg/dL
Source of data: LPR&IC telephone survey, July 1999.	

All but two of the states examined by the program review committee mandate reporting of lead screening tests. Maine only requires reporting if blood lead levels are at or above

20mcg/dL and Vermont for levels at or above 10 mcg/dL. Connecticut passed legislation that requires all results be tracked as of October 1, 1998; previously only levels at or above 10 mcg/dL were reportable.

**Intervention.** The Centers for Disease Control recommend various actions be taken at specific blood lead levels. These actions include: 1) education and nutrition counseling; 2) case management; 3) environment inspections of a child’s residence; and 4) medical evaluations. Table VI-5 compares the blood lead level at which each state requires a response, including the minimum blood lead level that triggers an environmental inspection (i.e., the dwelling of a child is inspected to determine if lead-based paint hazards are present).

**Table VI-5. Blood Lead Levels Requiring Specific Responses.**

<i>State</i>	<i>Provision of Education and Nutrition Information</i>	<i>Case Management</i>	<i>Environmental Inspections</i>
CT	≥10	≥20	≥20
MA	≥10	≥15	≥20 ≥25 allows warrant power
MD	≥10	≥15	≥20 or 2 tests ≥15
ME	≥20	≥20	≥20
NH	≥20	≥20	≥20
RI	≥10	≥15	≥20
VT	≥10	≥15	≥20

Source of data: LPR&IC telephone survey, July 1999.

**Education and nutritional counseling.** The provision of education and nutrition information on ways to reduce children’s exposure to lead hazards is an important step in preventing children’s blood lead levels from rising. If action can be taken early, less expensive methods can be used to reduce exposure. Almost all states surveyed, except Maine and New Hampshire, require education and nutrition information be provided to the parents or guardians of children with BLLs equal to or greater than 10 mcg/dL.

**Case management.** Case management is defined to mean coordination, provision, and oversight of the services to the family that are necessary to ensure lead-poisoned children achieve a reduction in blood lead levels. Four of the seven states surveyed require case management services to be provided to children with BLLs equal to or greater than 15 mcg/dL. Connecticut, Maine, and New Hampshire do not require case management until a child’s BLL reaches 20 mcg/dL or more.

**Environmental inspections.** The CDC recommends an environmental inspection of a child’s residence if a child has a BLL equal to or greater than 20 mcg/dL or two tests within 3 consecutive months equal to or greater than 15 mcg/dL. The environmental inspection is “triggered” by a BLL at or above 20 mcg/dL in five of the states surveyed, except for Massachusetts and Maryland. In Massachusetts, an environmental inspection is conducted if a child’s BLL is equal to or greater than 20 mcg/dL, however, the property owner can refuse admittance. A BLL at or above 25 mcg/dl results in the ability of the State Department of Health to obtain a warrant to inspect the child’s dwelling. In Maryland, inspections are conducted if a

child has a BLL equal to or greater than 20 mcg/dL or after two consecutive BLL's at or above 15 mcg/dL.

**Management and abatement of lead.** Table VI-6 outlines each state's policy on whether interim controls are allowed in dwellings where a lead poisoned child resides and identifies the types of surfaces requiring abatement. Interim controls are generally defined as temporary measures used to control urgent lead hazards immediately and reduce exposures. For example, an interim control would be to install metal inserts in window wells, rather than replacing the entire window. Connecticut and Maine do not allow interim controls in instances where an abatement order is issued (although Connecticut's proposed regulations would allow their use).

<b>Table VI-6. State Policy Regarding Allowing Interim Controls</b>		
<i>State</i>	<i>Interim Controls</i>	<i>Abatement</i>
CT	No	Loose & friction surfaces
MA	Yes, up to 2 years	All lead
MD	Yes	Loose and friction surfaces
ME	No	Loose and friction surfaces
NH	Yes	Loose and friction surfaces
RI	Yes	Loose and friction surfaces
VT	Yes	No abatement required
Source of data: LPR&IC telephone survey, July 1999.		

The committee examined the lead policy of each state in terms of whether the law requires a property to be fully abated or allows abatement of lead hazards only. Most states surveyed allow property owners to abate only lead hazards. Massachusetts is the only state examined by the committee that requires property owners to eliminate all lead-based paint found on the property, whether or not such paint is directly hazardous to the occupants. As shown in the table, all states, except Massachusetts, require loose and friction surfaces to be abated. Vermont's lead law is preventative and mandates essential maintenance practices be conducted on all rental properties and child care facilities to prevent lead exposure. The methods include visual inspections, installing window well inserts, specialized cleaning, and stabilizing paint—in many ways, similar to ongoing interim controls.

**Enforcement of orders.** A variety of methods are used to enforce compliance with lead orders issued to property owners. Rhode Island and Maine use their states attorneys general to bring contempt orders against noncompliant owners. Connecticut and Massachusetts rely upon both state and local court processes in enforcing compliance. Maryland, meanwhile, leaves the enforcement to the local health boards. Vermont's law is strictly voluntary. It seeks a collegial, collaborative approach, and although the Vermont Department of Health has the statutory authority to issue health orders for correction of lead hazards, none have ever been issued.

**Programs and financial resources.** Almost all states have programs that financially assist property owners to manage and/or abate lead from their properties. Three states offer tax credits of some sort to property owners:

- Massachusetts provides a tax credit of \$1,500 for full abatement and \$500 if interim controls are implemented;
- Rhode Island offers tax credits of up to \$1,000 per unit to property owners who abate lead; and
- Maine provides tax credits, but they are limited to owners of child-care facilities under lead abatement orders.

Table VI-7 shows the type of financial assistance available by state, and Table VI-8 outlines the average loan amount issued by selected states (those that had information). Statewide loan and grant assistance is available from every state.

<b>Table VI-7. Financial Assistance for Property Owners for Lead Hazard Management and Abatement.</b>		
<i>State</i>	<i>Tax Credits</i>	<i>Grants/Loans</i>
Connecticut	No	Yes
Maine	Yes	Yes
Maryland	No	Yes
Massachusetts	Yes	Yes
New Hampshire	No	Yes
Rhode Island	Yes	Yes
Vermont	No	Yes

Source of data: LPR&IC telephone survey, July 1999.

<b>Table VI-8. Average Loan Amount Issued by Selected States.</b>	
<i>State</i>	<i>Average Grant/Loan</i>
Connecticut	\$15,000
Maine	\$10,000
Maryland	\$3,700-\$5,000
Massachusetts	\$18,000
Vermont	\$9,000

Source of data: LPR&IC telephone survey, July 1999.

### **Medicaid Reimbursement**

The program review committee also examined national survey data to determine the number of states that receive Medicaid reimbursement for specific responses provided to a child with an elevated blood lead level. Supplemental information regarding Medicaid reimbursement was obtained from a survey conducted by the Alliance to End Childhood Lead Poisoning and the National Center for Lead-Safe Housing. In addition, representatives from Rhode Island, as well as the regional Health Care Financing Administration, visited Connecticut to discuss their recently approved Medicaid waiver that allows window replacement in dwellings occupied by a child who is lead poisoned.

Studies have shown children who are Medicaid recipients are at a high risk for elevated blood lead levels. Medicaid's EPSDT program requires all Medicaid children be screened at ages one and two for lead poisoning, regardless of a state's lead screening policy. In addition, children over the age of 24 months, up to 72 months, who have not been screened previously should also be screened. Several states have established a mechanism for the Medicaid program to reimburse for case management services and environmental investigations if a child has an elevated blood lead level. By classifying these services as a Medicaid benefit, states have been able to receive matching assistance from the federal government.

**Case management.** As noted above, case management is defined as the coordination, provision, and oversight of services to a family that are necessary to ensure lead-poisoned children achieve a reduction in blood lead levels. According to the survey conducted by the Alliance to End Childhood Lead Poisoning, 20 of the 51 state programs (and the District of Columbia) responding have a process in place for Medicaid reimbursement for case management. Five of the 20 states that responded positively, however, indicated they had not yet received any Medicaid reimbursement. Table VI-9 identifies the states that receive case management reimbursement. Reimbursement ranged from \$25 per visit in Wisconsin to \$70 per visit in Michigan.

**Table VI-9. Medicaid Reimbursement for Case Management Services.**

<i>State</i>	<i>Initial Visit</i>	<i>Follow-up Visit</i>	<i>Limits on Visits</i>
Alabama	\$36/hr	\$36/hr	No
California	Varies	Varies	No
Colorado	n/a	n/a	Yes -- 2 visits
Florida	n/a	n/a	No Response
Iowa	Varies	Varies	Yes- prescribed by doctor
Maryland	n/a	n/a	No
Massachusetts	n/a	n/a	Yes -- determined on case by case basis
Maine	n/a	n/a	No
Michigan	\$70/Visit	\$70/visit	Yes -- 2 visits
Minnesota	n/a	n/a	Does not know
Missouri	\$50 Visit	\$50/visit	No
North Dakota	n/a	n/a	No
New York	Varies	Varies	Yes -- varies case by case
Pennsylvania	\$30/hr	\$30/hr	No
Rhode Island	\$200 to open case	\$185/month	No
South Carolina	\$60/hr	\$60/hr	No response
Tennessee	\$54/hr	\$54/hr	Prior authorization from PCP in MCO
Texas	\$55/hr	\$55/hr	5 visits, prior authorization for more program only makes one visit
Vermont	n/a	n/a	program only makes one visit
Wisconsin	\$25/visit	no	1 nursing education visit only

Source of data: Alliance to End Childhood Lead Poisoning. "Another Link in the Chain, State Policies and Practices for Case Management and Environmental Investigation for Lead-Poisoned Children," June 1999, p.44.

**Environmental investigations.** The majority of states (35 of the 49 respondents to the survey question) use 20 mcg/dL as the blood lead level that triggers an environmental investigation. Of these, 13 also provide the service for a persistent or repeated level at 15

mcg/dL. A smaller number of states conduct environmental investigations at lower levels – nine states at 15 mcg/dL, and two between 10 and 15 mcg/dL.

Several states indicated on the alliance’s survey that they receive Medicaid reimbursement for the environmental investigation. Of the 51 programs that replied, 22 states have established a mechanism for the Medicaid program to reimburse for environmental investigations to determine the source of lead exposure for a lead-poisoned child. Table VI-10 outlines which states receive Medicaid funding for environmental inspections. As shown, Connecticut (as well as Maine, Massachusetts, and New Hampshire) does not receive Medicaid funding for inspection-related costs.

<b>Table VI-10. Medicaid Reimbursement for Environmental Investigations.</b>	
<i>States with Medicaid Reimbursement</i>	<i>States without Medicaid Reimbursement</i>
Alabama	Alaska
California	Arizona
Colorado	Arkansas
Florida	Connecticut
Georgia	Delaware
Illinois	District of Columbia
Iowa	Hawaii
Louisiana	Idaho
Michigan	Indiana
Missouri	Kansas
Nebraska	Kentucky
New Jersey	Maine
North Carolina	Maryland
North Dakota	Massachusetts
Ohio	Minnesota
Pennsylvania	Mississippi
Rhode Island	Montana
Tennessee	Nevada
Vermont	New Hampshire
Virginia	New Mexico
West Virginia	New York
Wisconsin	Oklahoma
	Oregon
	South Carolina
	South Dakota
	Texas
	Utah
	Washington
	Wyoming

Source of data: Alliance to End Childhood Lead Poisoning. "Another Link in the Chain, State Policies and Practices for Case management and Environmental Investigation for Lead-Poisoned Children," June 1999, p.63.

Table VI-11 shows the amount reimbursed by Medicaid for an environmental inspection. The reimbursement amount ranges from less than \$50 to over \$300. The amount of Medicaid reimbursement for the majority of states is between \$100 and \$199.

<b>Table VI-11. Medicaid Reimbursement For Environmental Inspection.</b>	
<i>Amount Reimbursed by Medicaid For Environmental Investigation</i>	<i>Number of States</i>
< \$50	2
\$100 - \$199	7
\$200 - \$299	3
> \$300	5
Variable based on time/expense	5
Source of data: Alliance to End Childhood Lead Poisoning. "Another Link in the Chain, State Policies and Practices for Case management and Environmental Investigation for Lead-Poisoned Children," June 1999, p.64.	

It is important to note the Health Care Financing Administration (HCFA), in a letter to all state Medicaid directors dated October 22, 1999, clarifies under what circumstances an environmental investigation may be covered under Medicaid. First, a child must have an elevated blood lead level. In addition, the scope of the investigation is limited. HCFA only reimburses for a health professional's time and activities during an on-site investigation of a child's primary residence. Medicaid funds are not available for the testing of environmental substances such as water, paint, or soil.

**Waiver for window replacement.** Finally, Rhode Island received approval for a Medicaid waiver that would provide Medicaid coverage for window replacement in a unit where a child was a Medicaid recipient and had a blood lead level equal to or greater than 20 mcg/dL. Windows are not a medical service traditionally covered by Medicaid. The waiver was approved by the federal Health Care Financing Administration in December 1998. During its first year, Rhode Island anticipates spending an average of \$1,830 per unit and providing window replacements in 200 to 300 units. Total spending is estimated at \$366,000 to \$549,000.

Landlords and homeowners would not initially be required to contribute financially for the new windows. However, after the state arranges to have the windows replaced, a lien would be placed on the property for the same amount as the cost of the work. The property owner would pay off the lien over time or wait until the property is sold.



## **APPENDICES**



# Appendix A

**Department of Public Health (DPH)  
Comments Regarding:  
Legislative Program Review and Investigations Committee  
Report on Residential Lead Abatement  
(Response Date: February 4, 2000)**

1. A Lead Poisoning Prevention web site was established on the Internet by the DPH in late 1999. Currently the principal lead laws and regulations and a variety of educational and outreach information regarding lead poisoning prevention are posted on the site. The posted educational materials provide information on lead poisoning, lead-safe renovation procedures, disclosure requirements during the sale and rental of residential properties and licensing and certification of lead contractors and lead activities professionals. Quarterly statistics on lead screening and prevalence will be posted in the near future.

Additionally, DPH is considering posting information regarding financial assistance programs that are available to property owners when such data is assembled in a useful format. The Department of Economic and Community Development will be contacted in this regard as many of the programs that are administered by that agency could provide assistance for lead abatement and hazard management activities. A private coalition, the Connecticut Lead Hazard Awareness Coalition (CHLAC), is conducting a survey of local health departments to identify sources of financial assistance that are utilized in various communities. It is anticipated that the survey will provide useful information regarding this issue.

Development of the site as an interactive conduit to exchange information with local health departments is more problematic as much of the information that is discussed in this context within the Committee Report is confidential medical data. Adequate safeguards to preserve that confidentiality would have to be developed.

2. The Committee Report recommends that CGS §19a-110 be amended to require that local health departments provide property owners with educational information regarding the reduction of lead hazards when an occupant child has been identified with a blood lead level  $\geq 10$   $\mu\text{g}/\text{dL}$ . The educational information is to be developed by the DPH. The DPH has information available that could be used to address this proposed requirement and incorporated within the department's existing standard package of educational and outreach materials. This standard package has been developed by DPH and provided to local health departments to assist local health agencies with existing mandates regarding the distribution of educational and outreach materials.
3. The department supports the Committee Report recommendation to extend mandated environmental intervention to those cases where children have been identified with blood lead levels in the range  $\geq 15$   $\mu\text{g}/\text{dL}$  to  $\leq 19$   $\mu\text{g}/\text{dL}$  in successive analyses that were due to diagnostic testing.

4. Due to less than complete screening data, the DPH Childhood Lead Poisoning Screening Committee in 1997 - 1998 recommended that universal screening for all children be implemented in accordance with current CDC screening guidelines. This policy was to remain in effect until such time that more complete screening data was available. The mandatory reporting of all blood lead laboratory test data became effective October 1, 1998 . In January 2000, the department finished analysis on that first year's data based upon mandatory reporting. The Childhood Lead Poisoning Screening Advisory Committee is about to be reconvened as the department proceeds with developing and implementing an updated permanent statewide plan that is consistent with CDC recommended practices.
5. The Committee is correct in concluding that Connecticut does not have a comprehensive approach to identifying lead-burdened children and abating the sources of their lead intoxication. It is less clear that charging private and public third party payers will assist in testing children, thus reducing the overall problem in the state. We believe that children are being missed because the present system to reach them, screen them for lead, and follow-up with treatment/abatement activities is fragmented at both programmatic and laboratory levels. There are at least seven different childhood lead programs operating in the state. Medicaid has contracted its lead testing out to a commercial laboratory which may or may not be providing a comprehensive data set necessary for tracking and follow-up. Health maintenance and private organizations test their patients at several other laboratories. The Public Health Laboratory provides free testing services, to grantees and local health departments, for both blood lead in children and for environmental lead in dwellings. It is significant that data from these various sources are not always linked and used effectively for prevention activities.

The Public Health Laboratory's information system is not currently structured to bill third party payers. The implementation and operation of a system to bill third party payers will be extremely expensive for the Public Health Laboratory. We estimate first-year costs in the range of \$175,000 to \$200,000 to perform the necessary system redesign and upgrade, to upgrade hardware, to cover increased operating costs, and to cover personnel costs to enter billing data, to bill third party payers, to bill individuals for required co-payments, and to process and deposit payments.

Revenue projections by the Committee would need to be reduced in light of those services provided without fee. For example, lead testing is frequently performed on behalf of local health directors. By statute (see CGS, Section 19a-26), all services to local health directors are mandated to be provided with a full waiver of fees.

Under the present budgeting system, revenues collected by the Public Health Laboratory are deposited directly to the General Fund. These revenues in no way help to offset the costs of laboratory operations. Under the Committee's proposal, increased costs would be incurred by the Public Health Laboratory, without offsetting

funding; this change would most likely put the Laboratory's budget in a deficit situation.

The Public Health Laboratory did not participate in the Committee's study. However, as the Committee's work moves forward, we would welcome the opportunity to work with the Committee to explore ways in which the Public Health Laboratory can assist in improving Connecticut's lead prevention activities.

6. The Committee Report recommends that the DPH establish "voluntary" essential maintenance practices for rental residential properties (AKA; standard of care). While the department supports this recommendation, the department believes that enabling legislation that would authorize the department to develop a standard of care would be an appropriate manner in which to proceed in this regard.
7. The Committee Report recommends that the DPH establish a single database that contains integrated case specific screening, management and environmental data. Although the DPH concurs with the need to establish such a comprehensive database, the current database structure does not support such a change. The department has initiated an on-going analysis and review of the current lead surveillance system with a goal of developing a comprehensive system that takes advantage of current relational database technologies. A key facet of the new system will be a comprehensive linkage between environmental investigation and case management data.
8. The Committee is correct in identifying problems with data quality and integration. Much of the source data related to blood lead testing derives from laboratory specimen submission forms. The submission forms are fraught with problems associated with incomplete or illegible hand-written data. Data that are required for case management, such as client social security number and date of birth, are often not required by the laboratory on its specimen submission form. Unless the quality of data derived through various laboratory systems is strengthened, the ability to link lab data to current and previous program records will continue to be compromised.

The proposed new data system will require a totally redesigned data capture process. This will effect when and where initial data capture happens, as well as how updates get into the data system.

There needs to be detailed definition on how to relate housing identifiers to children with elevated lead levels. As these children move from one residence to another, there needs to be a history of where they have lived, as well as their current address. How these addresses are correlated to the cause of one or more incidents of elevated lead will be a major challenge to the system.

The Department supports the utilization of the Internet , but would recommend that the data collection portion of this recommendation be deferred for at least a year. With the support of new grant funding for bioterrorism preparedness, DPH is in the

process of assisting all local health departments with internet access, and we could capitalize on that effort. The client-specific data that would be transmitted by local health departments to DPH is confidential and must be encrypted. An encryption process will be developed with the bioterrorism grant funding.

In conclusion, this is a long overdue but complex project. A new system will be costly and will take many months to define, design and implement. Other systems, such as WIC or STELLAR, may also need some funded enhancements to properly provide data to the new Lead System.

9. The Committee Report recommends that CGS §19a-111 be amended to require that local health departments use a standard form for epidemiological investigations. DPH has a recommended form that was recently revised and distributed to all local health departments.

Additionally, the Committee Report recommends that CGS §19a-111 be amended to require that local health departments forward epidemiological investigation information to DPH via the DPH web site. The issue of confidentiality must be addressed before such data can be transmitted over the Internet (see Comment #1 above).

10. In general, the Committee Report appears to support the department's proposed amendments to the Lead Poisoning Prevention and Control regulations, §19a-111-1 et seq. Changes have been drafted to the proposed amendments to satisfy the recommendations in the Report regarding: (a) the reporting of lead inspections to regulatory agencies by private sector inspectors who have been hired by property owners, and (b) the abatement of intact chewable surfaces in the residences of children who have elevated blood lead levels  $\geq 20 \mu\text{g/dL}$ .

Appendix B. Screening and Blood Lead Levels by Municipality For CY 98.							
	Number of Children Under Age 6	Number with a Valid Blood Lead test	Number of Children BLLs ≥10 mcg/dL	Percent of Valid Test ≥ 10 mcg/dL	Number of Children with BLLs ≥20	Percent of Valid Lead Test ≥ 20 mcg/dL	
Connecticut	272,294	56,339	2,483	4%	589	1%	
Andover	239	24	0	0%	0	0%	
Ansonia	1699	351	18	5%	3	1%	
Ashford	379	47	0	0%	0	0%	
Avon	945	133	0	0%	0	0%	
Barkhamsted	276	9	1	11%	0	0%	
Beacon Falls	457	87	1	1%	0	0%	
Berlin	1324	184	3	2%	0	0%	
Bethany	383	47	0	0%	0	0%	
Bethel	1,566	266	1	.4%	0	0%	
Bethlehem	245	20	0	0%	0	0%	
Bloomfield	1,252	280	8	3%	1	0%	
Bolton	389	21	0	0%	0	0%	
Bozrah	184	24	0	0%	0	0%	
Branford	2,041	211	1	1%	0	0%	
Bridgeport	14,013	3,976	668	17%	160	4%	
Bridgewater	94	11	0	0%	0	0%	
Bristol	5,116	560	13	2%	2	0%	
Brookfield	1,164	189	1	1%	0	0%	
Brooklyn	531	102	0	0%	0	0%	
Burlington	685	54	0	0%	0	0%	
Canaan	81	35	0	0%	0	0%	
Canterbury	402	77	0	0%	0	0%	
Canton	705	74	0	0%	0	0%	

<b>Appendix B. Screening and Blood Lead Levels by Municipality For CY 98.</b>							
	Number of Children Under Age 6	Number with a Valid Lead test	Number of Children BLLs ≥10 mcg/dL	Number of Children with Valid Test ≥ 10 mcg/dL	Percent of Children with BLLs ≥20	Percent Valid Lead Test ≥ 20 mcg/dL	Percent with Valid Lead Test ≥ 20 mcg/dL
Chaplin	182	11	0	0	0%	0	0%
Cheshire	1,943	200	0	0	0%	0	0%
Chester	270	46	0	0	0%	0	0%
Clinton	1,113	210	2	2	1%	0	0%
Colchester	1,168	128	2	2	2%	1	1%
Colebrook	114	0	0	0	0%	0	0%
Columbia	437	15	0	0	0%	0	0%
Cornwall	116	6	0	0	0%	0	0%
Coventry	999	84	4	4	5%	1	1%
Cromwell	950	98	0	0	0%	0	0%
Danbury	5,391	932	22	22	2%	1	0%
Darien	1,680	434	10	10	2%	2	1%
Deep River	337	46	1	1	2%	1	2%
Derby	932	198	1	1	1%	0	0%
Durham	501	67	0	0	0%	0	0%
Eastford	113	27	0	0	0%	0	0%
East Granby	369	77	0	0	0%	0	0%
East Haddam	613	84	2	2	2%	1	1%
East Hampton	936	110	3	3	3%	2	2%
East Hartford	3,783	848	24	24	3%	7	1%
East Haven	2,078	238	2	2	1%	0	0%
East Lyme	1,083	181	2	2	1%	0	0%
Easton	473	112	0	0	0%	0	0%
East Windsor	867	104	1	1	1%	0	0%
Ellington	887	153	0	0	0%	0	0%
Enfield	3,815	568	7	7	1%	1	0%
Essex	399	88	1	1	1%	0	0%
Fairfield	3,670	852	6	6	1%	0	0%

**Appendix B. Screening and Blood Lead Levels by Municipality For CY 98.**

	Number of Children Under Age 6	Number with a Valid Lead test	Number with Blood Lead test	Number of Children with BLLs ≥10 mcg/dL	Number of Children with Valid Test ≥ 10 mcg/dL	Percent with Valid Test ≥ 10 mcg/dL	Number of Children with BLLs ≥20	Percent of Valid Lead Test ≥ 20 mcg/dL	with Valid Lead Test
Farmington	1,639	95	1	1	1%	0	0%		
Franklin	142	18	0	0	0%	0	0%		
Glastonbury	2,078	117	4	4	3%	1	1%		
Goshen	178	5	0	0	0%	0	0%		
Granby	858	151	0	0	0%	0	0%		
Greenwich	3,874	251	1	1	0%	0	0%		
Griswold	1,048	133	3	3	2%	1	1%		
Groton	5,017	771	6	6	1%	1	0%		
Guilford	1,550	115	1	1	1%	0	0%		
Haddam	497	80	1	1	1%	0	0%		
Hamden	3,903	655	7	7	1%	5	1%		
Hampton	130	21	1	1	5%	0	0%		
Hartford	14,245	6,575	390	390	6%	85	1%		
Hartland	216	8	0	0	0%	0	0%		
Harwinton	443	10	0	0	0%	0	0%		
Hebron	790	31	1	1	3%	0	0%		
Kent	217	20	0	0	0%	0	0%		
Killingly	1,446	620	15	15	2%	3	1%		
Killingworth	398	76	0	0	0%	0	0%		
Lebanon	545	56	2	2	4%	0	0%		
Ledyard	1,405	160	3	3	2%	2	1%		
Lisbon	304	19	1	1	5%	0	0%		
Litchfield	618	16	0	0	0%	0	0%		
Lyme	124	13	0	0	0%	0	0%		
Madison	1,043	151	1	1	1%	1	1%		
Manchester	4,155	544	14	14	3%	4	1%		
Mansfield	827	100	1	1	1%	0	0%		
Marlborough	588	31	0	0	0%	0	0%		

<b>Appendix B. Screening and Blood Lead Levels by Municipality For CY 98.</b>							
	Number of Children Under Age 6	Number with a Valid Blood Lead test	Number of Children with BLLs $\geq 10$ mcg/dL	Percent with Valid Test $\geq 10$ mcg/dL	Number of Children with BLLs $\geq 20$	Percent of Valid Lead Test $\geq 20$ mcg/dL	Percent with Valid Lead Test $\geq 20$ mcg/dL
Meriden	5,433	1,367	78	6%	17	1%	1%
Middlebury	390	68	1	2%	0	0%	0%
Middlefield	352	34	0	0%	0	0%	0%
Middletown	3,343	678	11	2%	4	1%	1%
Milford	3,842	671	1	0%	0	0%	0%
Monroe	1,518	260	1	0%	0	0%	0%
Montville	1,433	225	4	2%	0	0%	0%
Morris	183	8	0	0%	0	0%	0%
Naugatuck	3,097	384	4	1%	1	0%	0%
New Britain	6,303	2,168	70	3%	12	1%	1%
New Canaan	1,306	443	2	1%	0	0%	0%
New Fairfield	1,132	193	2	1%	0	0%	0%
New Hartford	555	24	1	4%	1	4%	4%
New Haven	12,076	4,460	545	12%	146	3%	3%
Newington	1,809	149	2	1%	0	0%	0%
New London	2,377	704	10	1%	3	0%	0%
New Milford	2,293	196	0	0%	0	0%	0%
Newtown	1,807	391	1	0%	0	0%	0%
Norfolk	206	6	0	0%	0	0%	0%
North Branford	1,077	124	0	0%	0	0%	0%
North Canaan	239	6	0	0%	0	0%	0%
North Haven	1,489	171	0	0%	0	0%	0%
North Stonington	419	31	0	0%	0	0%	0%
Norwalk	6,205	2,085	29	1%	6	0%	0%
Norwich	3,455	698	48	7%	9	1%	1%
Old Lyme	466	91	2	2%	0	0%	0%
Old Saybrook	667	144	0	0%	0	0%	0%

**Appendix B. Screening and Blood Lead Levels by Municipality For CY 98.**

	Number of Children Under Age 6	Number with a Valid Blood Lead test	Number of Children BLLs ≥10 mcg/dL	Number of Children with Valid Test ≥ 10 mcg/dL	Percent with Valid Test ≥ 10 mcg/dL	Number of Children with BLLs ≥20	Percent with Valid Lead Test ≥ 20 mcg/dL
Orange	838	123	2	2	2%	0	0%
Oxford	855	153	1	1	1%	0	0%
Plainfield	1,349	465	7	7	2%	2	0.4%
Plainville	1,296	160	2	2	1%	0	0%
Plymouth	1,031	107	2	2	2%	0	0%
Pomfret	239	81	0	0	0%	0	0%
Portland	614	96	3	3	3%	0	0%
Preston	316	39	2	2	5%	0	0%
Prospect	636	83	0	0	0%	0	0%
Putnam	848	219	12	12	6%	3	1%
Redding	642	78	0	0	0%	0	0%
Ridgefield	1,767	288	2	2	1%	0	0%
Rocky Hill	1,124	88	2	2	2%	2	2%
Roxbury	125	12	0	0	0%	0	0%
Salem	337	43	0	0	0%	0	0%
Salisbury	278	10	0	0	0%	0	0%
Scotland	127	11	0	0	0%	0	0%
Seymour	1,152	215	4	4	2%	1	1%
Sharon	208	8	0	0	0%	0	0%
Shelton	1,958	542	7	7	1%	0	0%
Sherman	217	26	0	0	0%	0	0%
Simsbury	1,681	208	1	1	1%	1	1%
Somers	638	109	0	0	0%	0	0%
Southbury	1,013	217	0	0	0%	0	0%
Southington	3,013	244	4	4	2%	1	0%
South Windsor	1,886	275	1	1	0%	0	0%
Sprague	252	43	1	1	2%	0	0%
Stafford	1,112	153	3	3	2%	1	1%

**Appendix B. Screening and Blood Lead Levels by Municipality For CY 98.**

	Number of Children Under Age 6	Number with a Valid Blood Lead test	Number of Children BLLs ≥10 mcg/dL	Percent with Valid Test ≥ 10 mcg/dL	Number of Children with BLLs ≥20	Percent of Valid Lead Test ≥ 20 mcg/dL
Stamford	8,687	2,160	46	2%	10	1%
Sterling	228	89	0	0%	0	0%
Stonington	1,214	160	2	1%	1	1%
Stratford	3,442	868	13	2%	4	1%
Suffield	886	160	1	1%	0	0%
Thomaston	602	78	3	4%	1	1%
Thompson	755	161	6	4%	3	2%
Tolland	1,046	153	1	1%	0	0%
Torrington	2,743	89	5	6%	1	1%
Trumbull	2,313	354	3	1%	3	1%
Union	41	6	0	0%	0	0%
Vernon	2,577	336	11	3%	3	1%
Voluntown	193	51	0	0%	0	0%
Wallingford	3,407	458	11	2%	1	0%
Warren	91	4	0	0%	0	0%
Washington	314	15	1	7%	0	0%
Waterbury	10,139	3,285	158	5%	49	2%
Waterford	1,120	133	2	2%	0	0%
Watertown	1,557	203	1	1%	0	0%
Westbrook	364	81	2	3%	1	0%
West Hartford	3,923	462	12	3%	1	0%
West Haven	4,553	868	27	3%	5	1%
Weston	730	233	0	0%	0	0%
Westport	1,641	473	2	1%	1	0%
Wethersfield	1,556	133	2	2%	0	0%
Willington	497	40	0	0%	0	0%
Wilton	1,308	337	1	0%	0	0%
Winchester	944	40	10	25%	0	0%

**Appendix B. Screening and Blood Lead Levels by Municipality For CY 98.**

	Number of Children Under Age 6	Number with a Valid Blood Lead test	Number of Children with BLLs ≥10 mcg/dL	Percent with Valid Test ≥ 10 mcg/dL	Number of Children with BLLs ≥20	Percent with Valid Lead Test ≥ 20 mcg/dL
Windham	1,897	429	22	5%	6	1%
Windsor	2,207	339	8	2%	3	1%
Windsor Locks	912	119	2	2%	0	0%
Wolcott	1,031	171	0	0%	0	0%
Woodbridge	561	80	2	3%	0	0%
Woodbury	642	114	0	0%	0	0%
Woodstock	482	157	0	0%	0	0%

Source: DPH.



## Appendix C

### HUD REQUIREMENTS

<b>Summary of Requirements by Type of Housing.</b>			
<i>Subpart of Rule</i>	<i>Program</i>	<i>Construction Period</i>	<i>Requirements</i>
C	Disposition by Federal Agency other than HUD	Pre-1960	<ul style="list-style-type: none"> <li>• LBP inspection and risk assessment</li> <li>• Abatement of LBP hazards</li> <li>• Notice to occupants of clearance results</li> </ul>
		1960-1977	<ul style="list-style-type: none"> <li>• LBP inspection and risk assessment</li> <li>• Notice to occupants of clearance results</li> </ul>
D	Project-Based Assistance by Federal Agency other than HUD	Pre-1978	<ul style="list-style-type: none"> <li>• Provision of lead hazard information pamphlet</li> <li>• Risk assessment</li> <li>• Interim controls</li> <li>• Notice to occupants of clearance results</li> <li>• Response to EBL child</li> </ul>
F	HUD-owned Single Family sold with a HUD-insured mortgage	Pre-1978	<ul style="list-style-type: none"> <li>• Visual assessment</li> <li>• Paint stabilization</li> <li>• Notice to occupants of clearance results</li> </ul>
G	Multifamily Mortgage Insurance		
	For properties that are currently residential	Pre-1960	<ul style="list-style-type: none"> <li>• Provision of pamphlet</li> <li>• Risk assessment</li> <li>• Interim controls</li> <li>• Notice to occupants of clearance results</li> <li>• Ongoing LBP maintenance</li> </ul>
		1960-1977	<ul style="list-style-type: none"> <li>• Provision of lead hazard information pamphlet</li> <li>• Ongoing LBP maintenance</li> </ul>
	For conversions and major renovations	Pre-1978	<ul style="list-style-type: none"> <li>• Provision of lead hazard information pamphlet</li> <li>• LBP inspection</li> <li>• Abatement of LBP</li> <li>• Notice to occupants of clearance results</li> </ul>
H	HUD Project-Based Assistance Program		
	Multifamily Property Receiving more than \$5,000 per unit per year	Pre 1978	<ul style="list-style-type: none"> <li>• Provision of lead hazard information pamphlet</li> <li>• Risk assessment</li> <li>• Interim controls</li> <li>• Notice to occupants of clearance results</li> <li>• Ongoing LBP maintenance and reevaluation</li> <li>• More stringent response to EBL child</li> </ul>

**Summary of Requirements by Type of Housing.**

<i>Subpart of Rule</i>	<i>Program</i>	<i>Construction Period</i>	<i>Requirements</i>
	Multifamily property – receiving less than or equal to \$5,000 per unit per year, and single family properties	Pre-1978	<ul style="list-style-type: none"> <li>• Provision of lead hazard information pamphlet</li> <li>• Visual assessment</li> <li>• Paint stabilization</li> <li>• Notice to occupants of clearance results</li> <li>• Ongoing LBP maintenance</li> <li>• More stringent response to EBL child</li> </ul>
I	HUD-owned Multifamily Property	Pre-1978	<ul style="list-style-type: none"> <li>• Provision of lead hazard information pamphlet</li> <li>• LBP inspection and risk assessment</li> <li>• Interim controls</li> <li>• Notice to occupants of clearance results</li> <li>• Ongoing LBP maintenance</li> <li>• Response to EBL child</li> </ul>
J	Rehabilitation Assistance		
	Property receiving less than or equal to \$5,000 per unit	Pre-1978	<ul style="list-style-type: none"> <li>• Provision of lead hazard information pamphlet</li> <li>• Paint testing of surfaces to be disturbed, or presume LBP</li> <li>• Safe work practices in rehabilitation projects</li> <li>• Repair disturbed paint</li> <li>• Notice to occupants of clearance results</li> </ul>
	Property receiving more than \$5,000 and up to \$25,000	Pre-1978	<ul style="list-style-type: none"> <li>• Provision of lead hazard information pamphlet</li> <li>• Paint testing of surfaces to be disturbed, or presume LBP</li> <li>• Risk assessment</li> <li>• Interim controls</li> <li>• Notice to occupants of clearance results</li> <li>• Ongoing LBP maintenance if HOME or CILP</li> </ul>
	Property receiving more than \$25,000 per unit	Pre-1978	<ul style="list-style-type: none"> <li>• Provision of lead hazard information pamphlet</li> <li>• Paint testing of surfaces to be disturbed, or presume LBP</li> <li>• Risk assessment</li> <li>• Abatement of LBP hazards</li> <li>• Notice to occupants of clearance results</li> <li>• Ongoing LBP maintenance</li> </ul>
K	Acquisition, Leasing, Support Services, or	Pre-1978	<ul style="list-style-type: none"> <li>• Provision of lead hazard information pamphlet</li> <li>• Visual assessment</li> <li>• Paint stabilization</li> <li>• Notice to occupants of clearance results</li> </ul>

<b>Summary of Requirements by Type of Housing.</b>			
<i>Subpart of Rule</i>	<i>Program</i>	<i>Construction Period</i>	<i>Requirements</i>
	Operation		<ul style="list-style-type: none"> <li>• Ongoing LBP maintenance</li> </ul>
L	Public Housing	Pre-1978	<ul style="list-style-type: none"> <li>• Provision of lead hazard information pamphlet</li> <li>• LBP inspection</li> <li>• Abatement of LBP</li> <li>• Risk assessment if LBP not yet abated</li> <li>• Interim controls if LBP not yet abated</li> <li>• Notice to occupants of clearance results</li> <li>• Response to EBL child</li> </ul>
M	Tenant-Based Rental Assistance (requirements apply only to housing occupied by families with children under age six)	Pre-1978	<ul style="list-style-type: none"> <li>• Provision of lead hazard information pamphlet</li> <li>• Visual assessment</li> <li>• Paint stabilization</li> <li>• Notice to occupants of clearance results</li> <li>• Ongoing LBP maintenance</li> <li>• More stringent response to EBL child</li> </ul>
Source of data: HUD, New HUD Lead-Based Paint Regulation, Questions and Answers, September 16, 1999			



## Appendix D

### Glossary of Terms - HUD Regulation

**Abatement** – any set of measures designed to permanently eliminate lead-based paint or lead-based paint hazards. Abatement includes: (1) the removal of lead-based paint (LBP) and dust-lead hazards, the permanent enclosure or encapsulation of LBP, the replacement of components or fixtures painted with LBP, and the removal or permanent covering of soil-lead hazards; and (2) all preparation, cleanup, disposal, and post abatement clearance testing activities associated with such measures.

**Clearance examination** – an activity conducted following LBP hazard reduction activities to determine that the hazard reduction activities are complete and no soil-lead hazards or settled dust-lead hazards exist in the dwelling unit or worksite. The clearance process includes a visual assessment and collection and analysis of environmental samples.

**Environmental intervention blood lead level** – a confirmed concentration of lead in whole blood equal to or greater than 20 mcg/dL for a single test or 15-19 mcg/dL in two tests taken at least 3 months apart.

**Evaluation** – a risk assessment, a lead hazard screen, a LBP inspection, paint testing, or a combination of these to determine the presence of LBP hazards or LBP.

**Hazard reduction** – measures designed to reduce or eliminate human exposure to LBP hazards through methods including interim controls or abatement or a combination of the two.

**Interim controls** – a set of measures designed to reduce temporarily human exposure or likely exposure to LBP hazards. Interim controls include but are not limited to repairs, painting, temporary containment, specialized cleaning, clearance, ongoing LBP maintenance activities, and the establishment and operation of management and resident education programs.

**Lead-based Paint Hazard** – any condition that causes exposure to lead from dust-lead hazards, soil-lead hazards, or LBP that is deteriorated or present in chewable surfaces, friction surfaces, or impact surfaces, and that would result in adverse human health effects.

**Lead-based Paint Inspection** – a surface-by-surface investigation to determine the presence of LBP and the provision of a report explaining the results of investigation.

**Lead Hazard Screen** – a limited risk assessment activity that involves paint testing and dust sampling analysis, and soil sampling and analysis.

**Paint Stabilization** – repairing any physical defect in the substrate of a painted surface that is causing paint deterioration, removing loose paint and other material from the surface to be treated, and applying a new protective coating or paint.

**Risk Assessment** - (1) an on-site investigation to determine the existence, nature, severity, and location of LBP hazards; and (2) the provision of a report by an individual or firm conducting a risk assessment explaining the results of the investigation and options for reducing LBP hazards.

**Soil-lead Hazards** -- bare soil on residential property that contains lead equal to or exceeding levels promulgated by the U.S. Environmental Protection Agency pursuant to section 403 of the Toxic Substances Control Act or, if such levels are not in effect, the following levels: 400 mcg/mg in play areas; and 2000 mcg/mg in other areas with bare soil that total more than 9 square feet per residential property.

**Standard Treatments** -- a series of hazard reduction measures designed to reduce all LBP hazards in a dwelling unit without the benefit of a risk assessment or other evaluation.

**Visual Assessment** -- looking for, as applicable: (1) deteriorated paint; (2) visible surface dust, debris, and residue as part of a risk assessment or clearance examination; or (3) the completion or failure of a hazard reduction measure.

## Appendix E. CT Legislative History

<i>Public Act</i>	<i>Mandate</i>
PA 71-22	Requires reporting by physicians, hospitals, or laboratories of lead poisoning cases to DPH and provides for actions which are to be taken by the municipality to uncover and remedy the source of the poisoning.
PA 71-35	Provides a \$500 fine for violation of the statute dealing with packaging and sale of lead-based paint and use of such paint.
PA 87-304	Amends existing lead poisoning reporting requirements; lowers the level at which someone is considered to be suffering from lead poisoning from 40 to 25; and establishes a lead poisoning prevention program in the Department of Health Services (currently the Department of Public Health). Within the program, the commissioner must: (1) conduction educational and publicity activities on lead poisoning prevention; (2) establish an early diagnosis and detection program that would routinely screen young children; and (3) attempt to identify dwellings and areas with toxic levels of lead. The act also requires the commissioner to adopt regulations concerning certifying lead inspectors and lead abatement and removal contractors. Requires owner to remove or cover lead materials if toxic if children under aged six live. Commission must adopt regulations on removal and abatement materials.
PA 87-541	Allows housing commissioner to loan money to individuals and developers to pay for removing lead-based paint and asbestos products from residential dwellings, authorizes commissioner to adopt regulations to implement the program. Requires priority must be given to low- and moderate-income families and households with children suffering from lead paint poisoning. Under the act, loans may be given to nonprofit and for-profit housing developers, housing authorities, community housing development corporations, and individuals.
PA 90-114	Makes projects correcting public school violations of department regulations and federal standards for lead contamination in school drinking water eligible for funding under school construction grants.
PA 92-192	Lowers the blood lead level that must be reported to the Department of Health Services and local health departments from 25mcg/dL to 10 mcg/dL. Requires local health departments investigate all reports greater than 20 mcg/dL. Removes requirement for reporting by health practitioners (but not for institutions or labs) and eliminates reporting of "suspected cases". Reports still must be made within 48 hours. Allows commissioner to establish 2 regional lead poisoning treatment centers at hospitals. Establishes a 14-member Lead Poisoning Prevention Task Force with a reporting requirement of January 1993.
PA 92-234	By law DIM (now DSS) commissioner must provide emergency housing benefits to AFDC and SSP families when they are unable to secure permanent housing for specific reasons. This act extends benefits to those families relocated because a child has lead poisoning due to lead in the dwelling in which they live. Under the

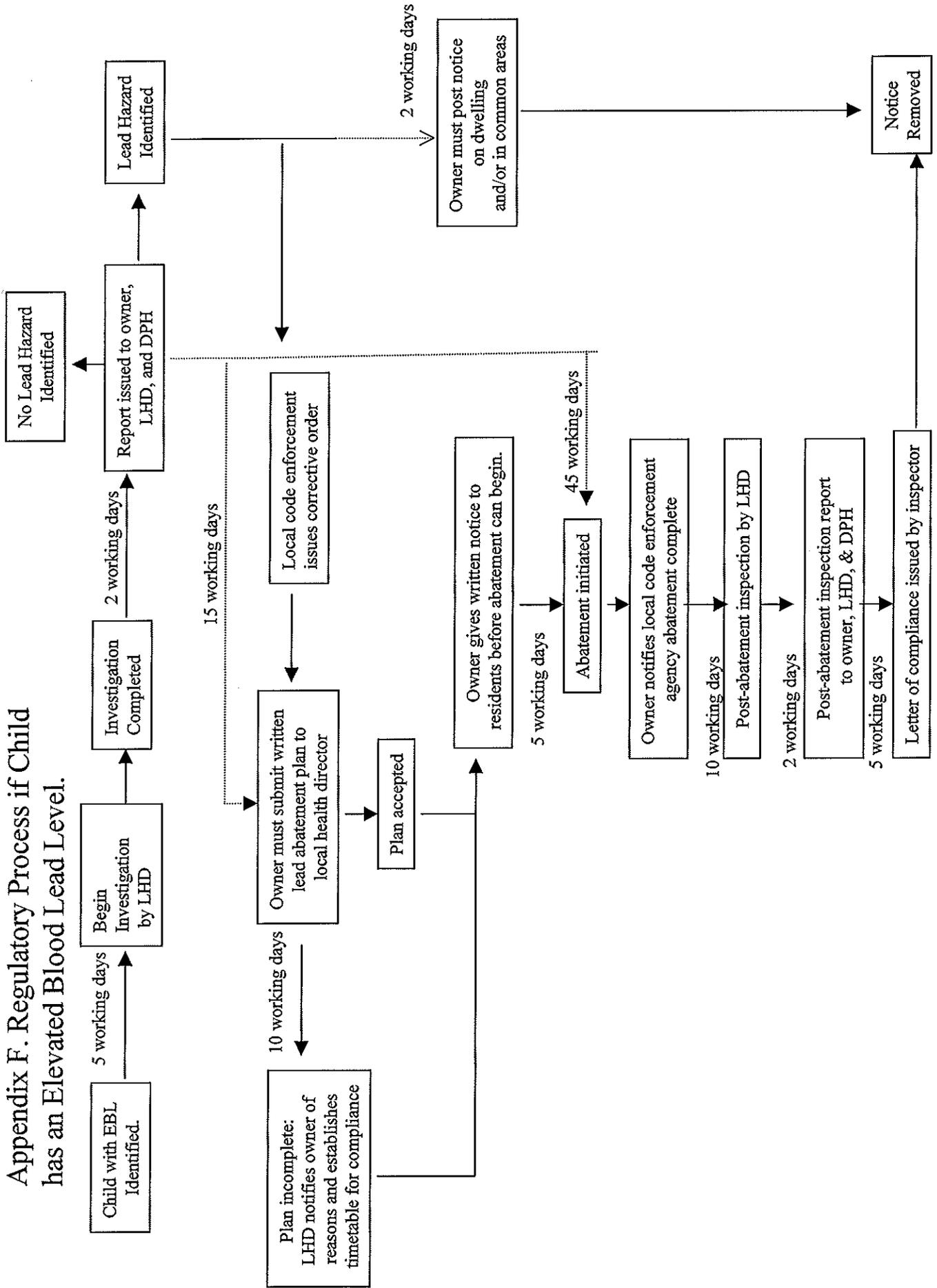
<b>Appendix E. CT Legislative History</b>	
<b>Public Act</b>	<b>Mandate</b>
PA 93-321	act, a child has lead poisoning with an BLL of 20 mcg/dL or more; or any other abnormal body burden of lead. Requires local health director provide information on lead poisoning and abatement of parents with children who have elevated lead blood levels. Allows local health directors to permit individuals to remain in their housing while lead is abated. Requires DOHS commissioner establish screening and treatment guidelines which specifically address children and pregnant women. Requires DOHS apply for federal funds, including Title X funds. Clarifies local health inspectors must make epidemiological investigation with children with blood levels at 20 or higher (previously was higher than 20), which must be on confirmatory blood test. Requires local health director "order" property owner abate lead.
PA 93-333	Allows AFDC and SSP families who receive a special needs benefit for housing to refuse to live in housing with paint containing a toxic level of lead under DHS regulations. Under prior law, any family that received this benefit had to agree to live in state or federally assisted housing.
PA 94-2	Increases the Department of Housing's bond authorization for housing development and rehabilitation from \$30 million to \$36 million. Prior law allowed DOH to provide financial assistance for the removal of lead paint and asbestos from housing. The act allows the department to provide grants as well as loans. Under prior law, at least \$3 million of DOH's bond authorization had to be used for lead and asbestos removal. P.A.94-2 increases this amount to at least \$5 million and specifies that these funds must be used for grants, loans, and technical assistance for a lead paint abatement program.
PA 94-220	Requires licensure of lead abatement and consultant contractors and certification of lead consultants and lead supervisors and abatement workers. Licenses and certificates must be renewed annually. Requires approval by Department of Public Health and Addition Services of lead abatement training and refresher courses. Allows DPHAS to take disciplinary action against violators of the act. Requires DPHAS adopt regulations on the licensure and certification requirements and may adopt regulations requiring passage of a department exam for certification. The act repeals a law that makes the presence of lead paint that violates federal standards, or any paint that causes a health hazard, a per se violation of a landlord's responsibilities to maintain his units in habitable condition. Under prior law the landlord could not collect rent if such paint was present in the unit.
PA 95-22	Broadens scope of DOH's hazardous materials programs by allowing program funds to be used to abate lead hazards, as well as remove them. Any regulations adopted must specify the eligibility and application requirements.
PA 95-204	Requires DPH commissioner to adopt regulations regarding removal and abatement requirements and procedures for materials containing toxic levels of lead. Commissioner must authorize the use of any encapsulant product.

## Appendix E. CT Legislative History

<i>Public Act</i>	<i>Mandate</i>
	Requires commissioner to keep a list of all approved encapsulants.
PA 95-210	Extends eligibility period under the emergency housing program for families with lead-poisoned children undergoing chelation treatment to remove lead from the blood.
PA 98-66	Increases the information in from laboratories and institutions for blood-lead levels over 10 mcg/dL and requires monthly reporting on all blood lead tests regardless of lead level.
Source: Office of Legislative Research, Summary of Public Acts, 1971 – 1999.	



# Appendix F. Regulatory Process if Child has an Elevated Blood Lead Level.







## Appendix H

CPOA (CT Property Owners Assoc.) Jan. 18, 1999 Follow-Up to the Legislative Regulations Review Committee  
Jan. 4, 1999 Arbitration Session on the DPH Proposed Lead Poisoning Prev. & Control Regs :

**A LIST of ONLY CHANGES REQUESTED WHICH CORRECT PORTIONS of the DPH PROPOSED LEAD REGS. WE'RE CONCERNED ARE WITHOUT LEGISLATED AUTHORITY, CONTRAVENE LEGISLATIVE HISTORY/INTENT, OR CONFLICT WITH EXISTING STATE OR FEDERAL STATUTES & CONSTITUTIONS**

- 1.) Portions of these DPH Proposed Regulations are DPH's latest regulatory attempt to require, without legislative authority, that private property owners of residential building (s) must hire and pay for a private lead inspector :

From 1989 thru 1992, DPH kept trying by proposed regulation drafts to try to get regs to directly require or order private property owners to hire private lead inspectors, without the benefit of legislation to that effect. However, in late 1992, the **\*CT Legislative Regulations Review Committee** (hereinafter called "Committee")'s 1992 actions clarified at their Arbitration Session that DPH had no authority to require owners do so, since by state statute it was local health department responsibility to conduct property lead inspections. Subsequently, at their September 1992 meeting, the Committee passed the regulations minus sentences from sections where DPH had proposed directing the owners to hire inspectors.

Subsequently, the Committee's 1992 actions were confirmed as being correct by **\*\*CT DPH Commissioner Stephen A. Harriman's 1995 written Final Decision in Furman v. Uncas Health District**, based upon **\*\*\*CT DPH Hearing Officer, Stephen J. Varga's 1995 Memorandum** in the case, and upon legislative history indicating clear legislative intent: via the **Committee's 1992 actions**.

**Again, without legislative authority, in these Proposed Regulations DPH proposes to directly order the owners to hire an inspector to conduct one aspect of lead testing: That of "confirmatory testing". Another attempt to shift some lead testing to owners is where in the regs. they propose to indirectly require:** if the owners don't hire a private inspector to test the majority of their building (s) surfaces for lead content, all the property's untested surfaces shall be considered in Sec. 19a(a)(2)(D), Page 9 and 8 of C.G.S., "as **THOUGH** containing a toxic level of lead", thus requiring abatement, repair or management of them anyhow, needed or not. Current regulations' portions containing some **indirect requirements** of the owners also without legislative authority, are addressed in **\*\*\*Furman v. Uncas District, per CT DPH Hearing Officer Varga's 1995 Memorandum:** "The Regulations clearly do not expressly authorize ordering to conduct or have lead inspections be performed. The question then is whether one can imply the authority to issue such an order.... The legislative intent to not allow such an order is unquestionable...The Regulation's explicit requirement placed on the owners does not necessarily suggest such authorization. On the contrary, the history of the Regulation strongly argues against such a proposition. In the presence of such clear direction by the Committee, we cannot find an implied authority to the contrary.... A review of the Regulations and its history indicates that the Appellants (owners) are not responsible for the inspection of the dwelling....The responsibility must rest with the Health District."

Thus, changes we request to make the Proposed Regulations conform to the law are:

Strike from Page 8, Sec. 19a - 111 - 3 (a) (1) (A) & (B): the word "representative" plus the last sentence of each;  
Strike from Page 9, Sec. 19a - 111 - 3 (a) (2) (D): the word "owner" where it appears in the last sentence which starts with the words "if deteriorated" and replace it with the words "LOCAL HEALTH DIRECTOR";  
Later in the same sentence, insert the words "owner shall" immediately following the words "that PAINT" and just before the words "abate OR REPAIR", and, near the end of that same sentence, strike the words "as **THOUGH** containing a toxic level of lead".

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\*See attached *CT Regulations Review Committee's September 1992 actions to strike portions of the proposed lead regulations, based upon the Regs. Review Committee Arbitration Session input of member Rep. Bob Frankel.*

\*\*See attached *DPH Commissioner Stephen Harriman's 6/29/95 Service of Final Decision, Docket # 0421212L P - A*

\*\*\*See attached *DPH Stephen J. Varga's 6/20/95 Memorandum of Recommended Decision, Docket # 941212 Lp - A*

- 2.) Since portions of these DPH Proposed Regulations force occupant relocation of occupants "as the rule" while lead abatement is taking place, the DPH proposed changes re: relocation clearly contravene the legislative intent of CT General Statute, Sec. 19a - 111:

Documented legislative history indicating clear legislative intent materially differs from DPH's proposal: In the "C.G.S., Revised to 1997" edition, the legislative History notation to Sec. 19a-111 actually states that a P.A. 93 - 321 amendment to that section "added provision permitting occupancy during abatement." when it added the following sentence:

"The local Director of Health may permit occupancy in said residential unit during abatement if in his judgment occupancy would not threaten the health and well-being of the occupants."

The DPH's Proposed Regulations, contradictory to both such P.A. 93 - 321 law change and current regulation 19a - 111 - 7(a), ignore such legislative history & intent to clearly permit occupancy. They flip it around, instead making high cost and relocation of families "the rule" during abatement and even simple repair projects, but the current regulation 19a - 1111 - 7( a ) allows occupation consistent with the law.

Thus, the simple changes we request to make the Proposed Regulations conform to the law are : Strike Sec. 19a - 111 - 4 ( c ) ( E ), Sec. 19a - 111 - 5 ( b ), and, Sec. 19a - 111 - 9 ( a ), and, instead, retain the applicable current regulation [ 19a - 111 - 7 ( a ) ] . which implements the law by allowing occupied areas during abatement, yet qualifies under what circumstances that continued occupancy can occur by addressing safety concerns by prohibiting residents from occupying a "room" or "work area" where lead abatement occurs.

- 3.) Portions of these Proposed Regulations: ( a ) contravene the legislative intent of Sec. 19a - 111b ( 3 ) of C.G.S.; ( b ) are without legislative authority and violate US Constitutional Rights of private property owners, when they order copies of private lead inspection reports which have been paid for by any owners ( including landlords) of privately owned property must be sent by private inspectors or the owner to the enforcement authorities, occupants, or anyone other than the property owner themselves :

- ( a ) DPH Proposed Regs. blatantly contravene the legislative intent of the sentence contained in Sec. 19a - 111b ( 3 ) of the C.G.S. that consists of the wording :

*"Any person who detects a toxic level of lead, as defined by the commissioner, shall report such findings to the commissioner."* which is the sentence that the DPH representative present at the Jan. 4th, 1999 Committee Arbitration Session claimed gives DPH authority to require private lead inspectors to send the property owners lead reports to enforcement authorities, etc. However, DPH is misconstruing and taking that sentence out of context when they do so, because that sentence is clearly a part of (and limited in application to within) that section of C.G.S. there, for which the C.G.S. Sec. 19a- 111 b ( 3 ) topic heading states:

*"Sec. 19a - 111b. Educational and publicity program. Early diagnosis program. Program for detection of sources of lead poisoning. Within the lead poisoning prevention program established pursuant to section 19a - 111a:"* . Please take note of the fact that both of those sections are ones with introductory sentences establishing governmental programs to be run *"within available appropriations"*, and the Sec. 19a - 111b ( 3 ) in particular, goes on to state regarding the information the commissioner receives from inspection reports obtained with monies of this program: *"The commissioner shall inform all interested parties, including but not limited to, the owner of the building, the occupants of the building, enforcement officials and other necessary parties."*

Additionally, context requires the "any persons" referred to in the preceding sentence as not meant to be private lead inspectors hired by a private property owner, since the very next sentence has the commissioner informing the property owner, so, obviously, the DPH has taken vastly out of context the very sentence from which they claim to have authority to require private property lead inspection reports be turned over to them and other enforcement authorities; and,

- ( b ) DPH Proposed Regs. here exceed legislated authority: since no law was passed to delegate to DPH

or mandate regs. on this topic & they violate constitutional rights of property owners, there is no legislative authority for requiring that private lead inspection reports paid for by owners of rental property be sent to the Director of Health. There's no CT law authorizing DPH to require so by regulation. Even if there were such a law, CT Judge Raymond Nook's 1995 ruling in a case "attacked a state law requiring insurance investigators to turn over results of their investigations to police departments that request information" calling the private investigators then "agents of the state and as such their entry onto the defendant's business without his consent constitutes an illegal search," in CT v. David Smith. Thus the regs. violate a property owner's 4th Amendment U.S. Constitutional Rights of no search without consent or a warrant (based upon probable cause), and an owner's 5th Amendment U.S. Constitutional Rights against self-incrimination. Note: See *provided article: Lawyer downplays arson ruling's importance Jan. 1995*. Also see the *provided articles: No More Mandatory Inspections (1994) and Highlights (Summer 1998, Vol. 2, No. 1)* about owner-favorable Federal court decisions similarly re: property inspection searches of rental properties without owner consent.

Thus, changes we request to make the Proposed Regulations conform to the law are :

Page 11, Sec. 19a - 111 - 3 ( d ) : In the first sentence, immediately following the sentence's first word "Whenever", strike the word "an" and replace it with the words "a municipal" immediately before the word "inspector";

In the first sentence, immediately after the words "inspector or", insert the word "municipal" immediately before the words "INSPECTOR RISK ASSESSOR";

Delete in entirety, the second sentence that begins with the words "HOWEVER, A PRIVATE INSPECTOR" and which ends with the words "DAY CARE SERVICES"; and,

In the fourth sentence which starts with the words "UPON REQUEST" and that ends with the words "OF THE INSPECTION," immediately before the words "inspector" and "risk assessor", and "inspection" insert the word "municipal".

4.) Definition ( 38 ) "Epidemiological Investigation" of these DPH Proposed Regulations Definitions conflicts with what is mandated that it must consist of in the enabling statute, Sec. 19a - 111 of C.G.S.:

19a - 110 of the CT General Statutes directs the local director of health "shall make or cause to be made an epidemiological investigation of the lead 'causing' the increased lead level or abnormal body burden", yet the DPH Proposed definition of 'Epidemiological Investigation' includes requiring no applicable environmental or scientific method (Isotopic Analysis) be used that can determine such cause. Instead, the Definition only includes wording that it "may" be used.

Note: See *portion of the provided one-page information sheet that contains Thomas M. Spittler, Ph.D., of New England Region I EPA Lab's description of applicable testing "Regarding Isotopic Analysis"*, as being akin to the commonly known and commonly done fingerprint identification testing process in other types of prosecutable cases.

The Proposed Regulation materially changes Definition ( 38 ) "Epidemiological Investigation regarding the local health director's legal responsibility by CT Statutes to determine the source of the lead 'causing' an elevated blood lead level by making the proposed definition of "Epidemiological Investigation" include language necessary to make mandatory the testing that can prove whether or not environmental samples taken of lead are causing the particular lead poisoning case at hand. The DPH's Proposed Regulation changes, by having the testing instead be optional, conflict with C.G.S. 19a - 111 of the C.G.S.

Thus, changes we request to make the Proposed Regulations conform to the law are :

Page 3, Definition (38): In the first sentence, after the word "evaluation" insert the words, "including applicable scientific testing necessary,"; and, In the last sentence, after the word "investigation" strike the word "may" & replace with the word "shall".

5. A portion of these Proposed Regulations exceed the scope of authority and DPH has no current legislative authority to promulgate any regs at this time on the topic that requires owners of housing units older than 50 years old must send private lead inspection reports to the CT Historical Commission, along with 'a good photo'. As a result, they add administrative confusion and unnecessary property owner lead abatement cost:

Thus, the simple deletion change we request to make the Proposed Regulations conform to the law is :  
Strike on Page 12, Sec. 19a - 111 - 3 (g) in its entirety.

- 6.) Phrases on Page 2, 5, 8 & 9 contained in these Proposed Regulations & listed herein below about lead amounts considered toxic in substances, testing methods & protocols methods & protocols contravene legislative intent of the following provisions of the CT Uniform Administrative Procedures Are: namely, Sec. 4 - 167 ( b ); Sec. 4 - 168 ( a ), ( d ), ( e ), ( f ), & ( h ) of the C.G.S. with language attempting to leave the herein below listed items to be changed arbitrarily by the Public Health Commissioner at will without public hearing & noticing requirements, a process that then arbitrarily triggers enforcement actions & penalties :

Since any public agency's written policy regarding the amount of considered toxic, testing methods and testing protocol(s) of a substance such as lead, is considered regulation(s) per Sec. 4 - 166, Definition 13: "Regulation" of the C.G. S., clearly a public agency's changes of such testing methods and protocol(s) are proposed regulations per Sec. 4 - 166, Definition (12): "Proposed Regulations" of the C.G.S. It clearly follows that it is the legislative intent that a public agency's proposed changes to regulations regarding its testing methods and protocols are subject to the public noticing and hearing requirements detailed in Sec. 4-168 through 4-173 of the C.G.S.

Thus, changes we request to make the Proposed Regulations conform to the law are:

From Page 2, Definition (24) "Confirmatory testing",

Page 5, Definition (69) "Toxic levels of lead", subsections (A) & (B);

Page 8, Sec. 19a - 111 - 3 (a) "Methods FOR INSPECTION AND TESTING OF LEAD - BASED PAINT", and,

Page 9, Sec. 19a - 111 - 3 (a) (2) (D), strike the following phrases in their entirety:

"OR ANOTHER PROTOCOL, DEEMED ACCEPTABLE BY THE COMMISSIONER", "OR ANOTHER TESTING PROTOCOL, DEEMED ACCEPTABLE BY THE COMMISSIONER", and "ANOTHER TESTING PROTOCOL DEEMED ACCEPTABLE" - where these phrases occur.

- 7.) Portions of these DPH Proposed Regulations are without DPH legislative authority to propose regulations on, since no law has authorized or mandated them to promulgate new regulations on the topic: Indeed, it appears to exceed the scope of DPH authority to be proposing new regulatory requirements to order an owner to transfer abatement, management or repair plans at time of transfer of title, without the benefit of a law change. The phrase "but not limited to" added to this list of items the property owner has to keep and transfer with title turns the EPA Disclosure Rule requirement into an open-ended, arbitrary quagmire of a rule, difficult then for an owner on any given closing day to determine they've complied with.

Thus, the simple deletions we request to make the Proposed Regulations conform to the law are :

From Page 6, Sec. 19a - 111 - 2 ( a ) ( 5 ): Strike the words : "and transferred with ownership upon transfer of title. In sentence 3, strike the words "and transferred with ownership upon transfer of title" immediately following the words "kept by the owner".

From Page 12, Sec. 19a - 111 - 3 ( k ) & Page 16, 19a - 111 - 4 ( f ): Strike the words "but not limited to" Additionally, Strike the last sentence of both sections in their entirety.

- 8.) In the second page issue items of Atty. Phil Block's "Comments to the Regulations Review Committee on the Lead Regulations, per 19a-111 and 10a-111c, Jan. 4, 1999" we also support the concerns he's described in his list with respect to Enforcement Procedures and his list of Recommendations .

# Appendix G. Regulatory Process if Child does not have an Elevated Blood Lead Level.

