Congressional Research Service
Informing the legislative debate since 1914

Lead-Based Paint Poisoning Prevention: Summary of Federal Mandates and Financial Assistance for Reducing Hazards in Housing

-name redacted-
Analyst in Environmental Policy

January 17, 2013

Congressional Research Service
7-....
www.crs.gov
RS21688

CRS REPORT
Prepared for Members and
Committees of Congress

Summary

According to the Centers for Disease Control and Prevention (CDC), about 1.4% of surveyed children living in the United States between the ages of 1 and 5 years have an unacceptably high level of lead in their blood (i.e., 10 micrograms or more of lead per deciliter of blood), which may result in learning disabilities, reduced intellectual ability, or other problems. Poor children are at special risk because elevated blood-lead levels are more prevalent among children from families with lower incomes, and inadequate nutrition can increase lead absorption by the body. Many sources of lead exposure have been eliminated or reduced, but an important remaining source of lead exposure today is house dust containing lead-based paint (LBP) from deteriorated or abraded surfaces of walls, door jambs, and window sashes, or from home renovations that release LBP. Many buildings constructed prior to 1978, when the lead content of interior paint was restricted to current levels, still contain LBP, but most LBP is found in homes constructed prior to 1960.

The federal Lead-Based Paint Poisoning Prevention Act (LBPPPA), as amended, directs the Department of Housing and Urban Development (HUD) to regulate, and authorizes funding for, the detection and control of LBP hazards in housing that receives federal assistance. There are no federal mandates related to LBP in privately owned housing unless it receives federal financial assistance in some form. However, the Residential Lead-Based Paint Hazard Reduction Act of 1992 (Title X of the Housing and Community Development Act of 1992; P.L. 102-550) directs the U.S. Environmental Protection Agency (EPA) to require training and certification in LBP safe work practices for contractors engaged in home renovations and repairs of homes constructed prior to 1978. In addition, Title X authorizes federal grants through HUD to state and local governments for LBP hazard reduction in privately owned housing that does not receive federal assistance. Congress annually considers funding for these lead hazard reduction grant programs, all of which target older (pre-1978) housing for low-income residents.

Contents

Figures

Contacts

Background

What Is the Extent of the Lead-Based Paint Problem?

According to the Centers for Disease Control and Prevention (CDC), about 1.4% of surveyed children living in the United States between the ages of 1 and 5 years had an unacceptably high level of lead in their blood (i.e., 10 micrograms or more of lead per deciliter [i.e., one-tenth of a liter] of blood) between 1999 and 2004.[1] Elevated blood-lead levels may result in learning disabilities, reduced intellectual ability, or other problems. The National Toxicology Program is evaluating the health effects of even lower levels of exposure to lead.[2] Poor children are at special risk because elevated blood-lead levels are more prevalent among children from families with lower incomes, and inadequate nutrition can increase lead absorption by the body.[3]

The current incidence of elevated blood-lead levels is much less than it was between 1991 and 1994, when CDC estimated that 4.4% of children between 1 and 5 years of age had elevated lead levels.[4] The drop in blood-lead levels since 1994 may have resulted, at least in part, from the success of federal, state, and local programs aimed at reducing childhood exposure to sources of lead, including house dust containing lead-based paint (LBP) from deteriorated or abraded surfaces of walls, door jambs, and window sashes.[5] It is not necessary for a child to eat paint chips to become poisoned: normal hand-to-mouth behavior in a lead-contaminated home can deliver enough lead to damage the developing nervous system of a child under the age of seven years.

Many buildings constructed prior to 1978, when the lead content of interior paint was restricted to current levels, still contain LBP, although most of the lead is found in the existing 18.4 million homes constructed prior to 1960. About 23 million U.S. homes have significant lead-based paint hazards, according to the 2011 American Healthy Homes Survey.[6]

[1] Robert L. Jones, David M. Homa, and Pamela A. Meyer, et al., "Trends in Blood Lead Levels and Blood Lead Testing Among US Children Aged 1 to 5 Years, 1988–2004," *Pediatrics,* vol. 123, no. 3 (March 1, 2009), pp. e376-e385, http://www.pediatricsdigest.mobi/content/123/3/e376.full.pdf+html. No more recent data are available as of January 2013.

[2] National Toxicology Program, "Health Effects of Low-level Lead Evaluation," February 22, 2012, http://ntp.niehs.nih.gov/?objectid=4F04B8EA-B187-9EF2-9F9413C68E76458E.

[3] Centers for Disease Control and Prevention, *Fourth National Report on Human Exposure to Environmental Chemicals*, 2009, p. 215, http://www.cdc.gov/exposurereport/pdf/FourthReport.pdf.

[4] Centers for Disease Control and Prevention, ibid.

[5] Other sources of lead historically have included widespread exposures from lead in gasoline and locally significant exposures near smelters and mining operations and tailings piles. This report is focused only on lead-based paint poisoning prevention.

[6] Department of Housing and Urban Development, American Healthy Homes Survey, Lead and Arsenic Findings, 2011, p. ES-1, http://portal.hud.gov/hudportal/documents/huddoc?id=AHHS_REPORT.pdf.

What Are the Risk Management Options, and What Would They Cost?

Several options are available for LBP risk management in housing. Complete removal of LBP from the interior surfaces of a residence by a qualified contractor provides the best protection for children. Removal, however, can be very costly and therefore could result in fewer residences being remediated. The Department of Housing and Urban Development (HUD) estimated in 1999 an average cost of $9,000 per dwelling[7] for an inspection, risk assessment, and full abatement when HUD procedures were followed.[8] The total cost of inspecting and abating hazards in all 18.4 million homes that were constructed prior to 1960 and were in existence at that time was estimated to be about $16.6 billion per year for 10 years.[9] At the end of that period, all homes constructed prior to 1960 would have been renovated or demolished. If only 2.3 million low-income housing units were fully abated, the estimated cost would be $2.1 billion per year.

Alternatively, all homes constructed prior to 1960 could be inspected and homes with LBP hazards, such as loose or peeling paint, could be managed with interim measures to reduce exposure at a cost of about $2,500 per unit. For example, LBP could be covered over with lead-free paint. According to HUD, because only about one-third of the units would present LBP hazards in need of control, the estimated total cost of interim measures over 10 years would be approximately $1.84 billion per year. At the end of that period (i.e., in the year 2010), the houses constructed prior to 1960 would be lead-safe, but maintenance would have to continue for houses not abated or demolished. If interim measures were applied only to low-income housing, HUD estimated the total cost to be $230 million per year.[10]

Abatement of hazards also produces qualitative and quantitative benefits: according to the economic analysis conducted for the 1999 rule by HUD, the *primary* quantitative benefit of reducing LBP hazards derives from higher intelligence quotient (IQ) levels and associated increases in lifetime earnings of children who avoid lead exposure.[11] HUD estimated that when a child's blood-lead concentration increases by one microgram of lead per deciliter of blood, average lifetime earnings are reduced by between $544 (present value in 1999, discounted at 7%) and $2,367 (present value in 1999, discounted at 3%), due to reduced cognitive ability.[12]

---

[7] The terms "dwelling," "home," and "housing unit" are synonymous in the context of housing rules. The terms refer to the residence regardless of building type. HUD defines "housing units" to include permanently occupied, noninstitutional housing units in which children are permitted to live.

[8] 64 *Federal Register* 50140-50231. Department of Housing and Urban Development, Regulatory Impact Analysis of the Final Rule on Lead-Based Paint: Requirements for Notification, Evaluation and Reduction of Lead-Based Paint Hazards in Federally Owned Residential Property and Housing Receiving Federal Assistance, prepared by ICF, Inc., for U.S. Department of Housing and Urban Development, Office of Lead Hazard Control, 1999. Hereinafter cited as HUD, Regulatory Impact Analysis, 1999.The HUD estimate does not include the cost of temporarily relocating families during abatement, or possible costs of disposal of hazardous waste.

[9] President's Task Force on Environmental Health Risks and Safety Risks to Children, *Eliminating Childhood Lead Poisoning: A Federal Strategy Targeting Lead Paint Hazards*, February 2000, p. 24. Hereinafter, President's Task Force.

[10] Ibid.

[11] HUD, Regulatory Impact Analysis, 1999.

[12] Ibid., p. 50186. In 1999, the U.S. Census Bureau estimated that average lifetime earnings ranged between $1.0 million and $4.4 million, depending on educational attainment, for full-time, year-round workers. The Census Bureau report is available at http://www.census.gov/prod/2002pubs/p23-210.pdf.

Federal Mandates

The Lead-Based Paint Poisoning Prevention Act, as amended (LBPPPA, 42 U.S.C. 4822), is the basis for federal regulation of LBP hazards. It directs HUD to establish procedures to eliminate "as far as practicable" LBP hazards[13] in all public housing and private housing constructed prior to 1978 that receive federal financial assistance.[14] The act requires periodic risk assessments and interim measures to reduce identified LBP hazards in such housing. In addition, the act requires inspection for LBP hazards prior to federally funded rehabilitation or renovation. LBP hazards must be reduced in projects receiving less than $25,000 in federal funds and eliminated if a project receives at least $25,000 in federal funds.[15] Risk assessments, inspections, and interim and permanent measures to reduce or eliminate LBP hazards are eligible rehabilitation expenses for federal funds.

The federal government, acting through HUD, pays for the construction and renovation (including LBP detection and abatement) of public housing, using funds available through the Public Housing Capital Fund grant program to carry out the requirements of the LBPPPA. Public Housing Authorities (PHAs) administer public housing programs locally. Some PHAs are units of general local government. In such cases, local government may be responsible for implementing HUD's LBP testing and abatement regulations in public housing.

There are no federal mandates related to LBP in privately owned housing unless it receives federal financial assistance in some form. There are, however, EPA (40 C.F.R. Part 745) and HUD (24 C.F.R. Part 35) rules governing the manner in which home renovations and inspections are conducted by contractors. These rules require training and certification of contractors and prohibit certain practices (such as dry scraping or high-temperature heat guns) that would increase the risk of exposure to lead-based paint.

Federal Grants

The Residential Lead-Based Paint Hazard Reduction Act of 1992 (Title X of the Housing and Community Development Act of 1992)[16] authorizes federal grants to state and local governments that choose to establish LBP poisoning prevention programs targeted at low-income residents in private housing. Grants may be used to conduct risk assessments and to remove, immobilize, or

[13] A lead-based paint "hazard" is "any condition that causes exposure to lead from lead-contaminated dust, lead-contaminated soil, lead-contaminated paint that is deteriorated or present in accessible surfaces, friction surfaces, or impact surfaces that would result in adverse human health effects as established by the appropriate Federal agency" (P.L. 102-550, §1004(15)).

[14] The requirement applies to private housing that receives housing assistance payments under a program administered by HUD or more than $5,000 in project-based assistance through another federal housing program. Under Title X of the Housing and Community Development Act of 1992, "Federally Assisted Housing" is defined such that it excludes single-family housing financed with an FHA-insured or VA-insured mortgage. Certain multifamily properties with FHA-insured mortgages (under the Section 221(d)3 and Section 236 programs) are defined as "Federally Assisted Housing," along with certain multifamily properties serving families who are elderly or have disabilities that receive HUD subsidies and certain properties with HUD-funded rental assistance under the Section 8 programs. However, single-family (and multifamily) homes with U.S. Department of Agriculture (USDA) rural housing loans or insured mortgages are defined as "federally assisted housing" under the law.

[15] 64 *Federal Register* 50140-50231, September 15, 1999.

[16] The Housing and Community Development Act may be found at 42 U.S.C. 5308.

otherwise reduce the LBP hazard, with particular attention to hazards to children living in housing constructed prior to 1978. Congressional authorization for these grants expired September 30, 1994, but Presidents have continued to request funds, and Congress has continued to appropriate them.[17] For FY2001 through FY2012, Congress appropriated funds for state and local grants to reduce lead-based paint hazards, as shown in **Figure 1**. Since FY1992, Congress has appropriated more than $1.5 billion for these Title X grants to state and local governments to assess and reduce LBP risks in private housing for low-income residents.[18] In addition, Congress has appropriated roughly $400 million, also under Title X, for related LBP abatement by nongovernmental organizations and for training, certification, and research programs.

In FY2003, Congress established a third parallel demonstration program for LBP abatement targeted at major urban areas with "the highest lead paint abatement needs" based on "the number of occupied pre-1940 units of rental housing" and "a disproportionately high number of documented cases of lead-poisoned children." Congress appropriated between $45 million and $50 million annually through FY2012 for these urban areas.[19]

Appropriations Relative to Needs

In 2000, President Clinton's Task Force on Environmental Health Risks and Safety Risks to Children released *Eliminating Childhood Lead Poisoning: A Federal Strategy Targeting Lead Paint Hazards*, which aimed to eliminate LBP hazards to children by 2010. The strategy recommended that the federal government provide funding through grants to control LBP using interim measures in the 2.3 million units of privately owned, low-income housing that were constructed prior to 1960 and that were not receiving federal assistance (and therefore were not covered by HUD regulations). Assuming that some of the cost could be met by state, local, or private funding, leveraged by federal funding, the task force recommended a 50% increase in

[17] Department of Housing and Urban Development Budget Authority by Program, Comparative Summary, Fiscal Years 2001-2003.

Department of Housing and Urban Development, *Congressional Justifications for 2005 Estimates*, Fiscal Year 2005 Budget Summary, p. 33.

Department of Housing and Urban Development, *Congressional Justifications for 2007 Estimates*, Part 3, Lead-Based Paint Hazard Reduction Program, p. B-7.

Department of Housing and Urban Development. *Congressional Justifications for 2009 Estimates*, Healthy Homes and Lead Hazard Control, pp. Q-1, Q-16.

Department of Housing and Urban Development. *Congressional Justifications for 2010 Estimates*, Healthy Homes and Lead Hazard Control, p. T-1.

U.S. Congress, House of Representatives, H.Rept. 111-366, Departments of Transportation and Housing and Urban Development, and Related Agencies Appropriations Act, 2010, to accompany H.R. 3288 (P.L. 111-117).

P.L. 112-10, Department of Defense and Full-Year Continuing Appropriations Act, 2011, April 15, 2011, §2253.

U.S. Congress, House of Representatives, H.Rept. 112-284, Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Programs for the Fiscal Year Ending September 30, 2012, and for Other Purposes, to accompany H.R. 2112 (P.L. 112-55).

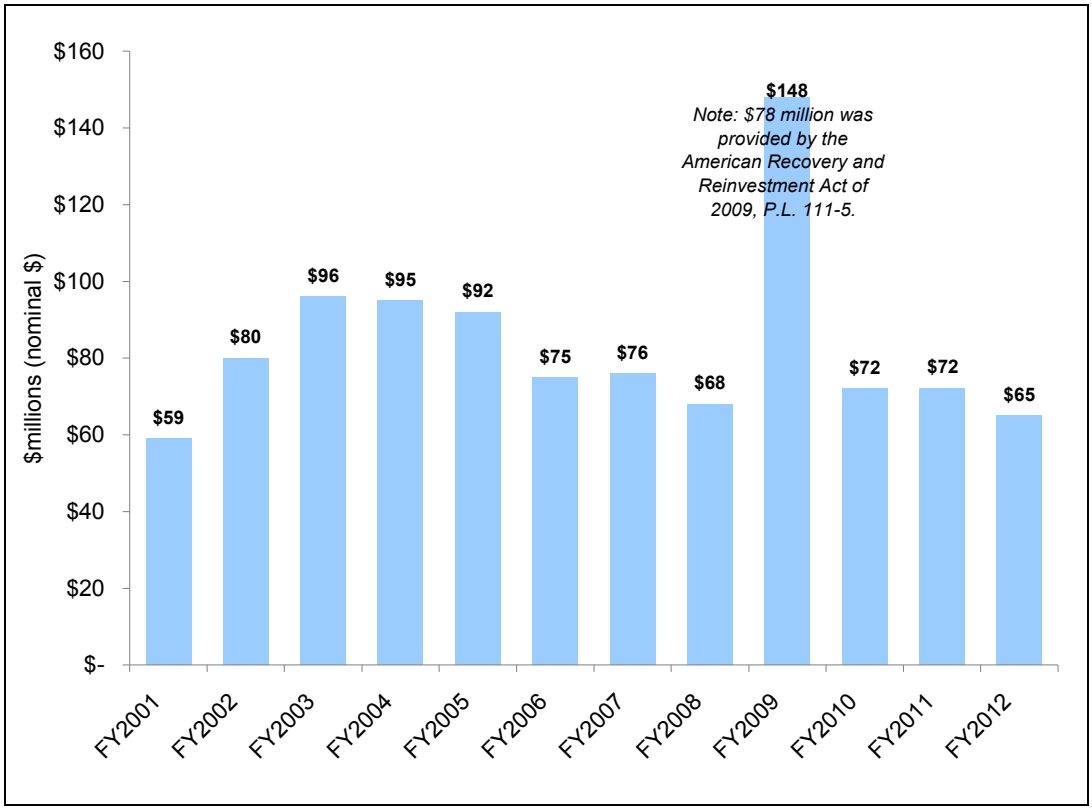
Department of Housing and Urban Development. *Congressional Justifications for 2013 Estimates*. Healthy Homes and Lead Hazard Control, Lead Hazard Reduction, 2013 Summary Statement and Initiatives, p. M-1.

[18] Ibid.

[19] For FY2011, Congress appropriated funds for the three grant categories (state and local hazard reduction grants, training and research grants, and urban area abatement grants) by directing HUD to utilize the FY2010 allocations of funding for the account. See P.L. 112-10, the Department of Defense and Full-Year Continuing Appropriations Act, 2011, April 15, 2011, §2253.

federal grant funding under the Residential Lead-Based Paint Hazard Reduction Act, from $60 million in FY2000 to $90 million for FY2001.[20] As shown in **Figure 1**, Congress met that goal in FY2003, FY2004, and FY2005, but did not maintain that level of funding in subsequent years, with the exception of FY2010, when ordinary appropriations were supplemented by the American Recovery and Reinvestment Act of 2009, P.L. 111-5. Nevertheless, over 20 years Congress has appropriated roughly $2.0 billion to address LBP hazards in target housing ($1.5 billion through the state and local grant program, and $0.5 billion through the urban area abatement grants), an amount that appears to be in the same order of magnitude as the amount recommended by the President's Strategy, assuming that the 1999 HUD estimates were accurate for interim abatement of low-income housing constructed prior to 1960.[21]

Figure 1. Annual Levels of Funds Appropriated for State/Local Lead-Based Paint Hazard Reduction Grants, FY2001-FY2012



Source: CRS, based on Department of Housing and Urban Development (HUD) Budget Authority by Program, Comparative Summary, Fiscal Years 2001-2003; HUD, *Congressional Justifications for 2005 Estimates.* Fiscal Year 2005 Budget Summary, p. 33; HUD, *Congressional Justifications for 2007 Estimates*, Part 3, Lead-Based Paint Hazard Reduction Program, p. B-7; HUD, *Congressional Justifications for 2009 Estimates,* Healthy Homes and Lead Hazard Control, pp. Q-1, Q-16; HUD, *Congressional Justifications for 2010 Estimates,* Healthy Homes and Lead Hazard Control, p. T-1; U.S. Congress, House of Representatives, H.Rept. 111-366, Departments of Transportation and Housing and Urban Development, and Related Agencies Appropriations Act, 2010, to accompany H.R. 3288 (P.L. 111-117); P.L. 112-10, Department of Defense and Full-Year Continuing Appropriations Act, 2011, April 15,

[20] President's Task Force, p. 9.

[21] A direct comparison is not possible between appropriated funds and the cost of LBP control (as estimated in 1999 by HUD and described above under the heading "What Are the Risk Management Options, and What Would They Cost?") due to changes over time in the value of a dollar, the cost of abatement, and the condition and size of the housing stock.

2011, Section 2253; U.S. Congress, House of Representatives, H.Rept. 112-284, Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Programs for the Fiscal Year Ending September 30, 2012, and for Other Purposes, to accompany H.R. 2112 (P.L. 112-55); HUD, *Congressional Justifications for 2013 Estimates*. Healthy Homes and Lead Hazard Control, Lead Hazard Reduction, 2013 Summary Statement and Initiatives, p. M-1.

The President's task force also suggested exploring the use of financial incentives, such as tax credits or deductions, to reduce LBP hazards in housing for (1) additional low-income families not served by HUD grants and (2) moderate-income families with young children.

Legislation

In the 112th Congress, H.R. 3325 would have required the Director of HUD's Office of Healthy Homes and Lead Hazard Control to lead a federal initiative to support healthy housing and eradicate housing-related health hazards. Congress did not act on this proposal. Also in the 112th Congress, H.R. 5911/S. 2148 would have amended provisions of TSCA imposing the renovation, repair, and painting requirements, but neither chamber acted on this proposal.

In the 111th Congress, S. 1245 would have provided owners of residential properties built before 1960 with a tax credit for LBP abatement costs. Similar proposals were introduced in previous Congresses. No such legislation has been enacted.

A more general expansion of mandates as well as grant eligibility for housing with lead-based paint was proposed in the 110th Congress. S. 2244 would have required "a seller or lessor of housing to: (1) conduct a risk assessment or inspection for the presence of lead-based paint hazards ...; (2) disclose to the purchaser or lessee the results of such inspection or assessment and hazard control measures carried out; (3) remediate any lead-based paint hazards found; and (4) include in any contract for the purchase or lease of housing documentation of any inspection, risk assessment, or hazard control measure." In addition, S. 2244 would have authorized grant expenditures for lead hazard reduction in housing for the elderly or persons with disabilities and for dwellings with no bedrooms, housing categories that currently are excluded from the lead hazard reduction grant program. Finally, the bill would have directed the Department of Energy (DOE) to require the conduct of lead hazard control measures during weatherization projects. None of these provisions was enacted.

Author Contact Information

(name redacted)
Analyst in Environmental Policy
[redacted]@crs.loc.gov, 7-....

Acknowledgments

This report was written by (name redacted), who has retired from CRS.

EveryCRSReport.com

The Congressional Research Service (CRS) is a federal legislative branch agency, housed inside the Library of Congress, charged with providing the United States Congress non-partisan advice on issues that may come before Congress.

EveryCRSReport.com republishes CRS reports that are available to all Congressional staff. The reports are not classified, and Members of Congress routinely make individual reports available to the public.

Prior to our republication, we redacted names, phone numbers and email addresses of analysts who produced the reports. We also added this page to the report. We have not intentionally made any other changes to any report published on EveryCRSReport.com.

CRS reports, as a work of the United States government, are not subject to copyright protection in the United States. Any CRS report may be reproduced and distributed in its entirety without permission from CRS. However, as a CRS report may include copyrighted images or material from a third party, you may need to obtain permission of the copyright holder if you wish to copy or otherwise use copyrighted material.

Information in a CRS report should not be relied upon for purposes other than public understanding of information that has been provided by CRS to members of Congress in connection with CRS' institutional role.

EveryCRSReport.com is not a government website and is not affiliated with CRS. We do not claim copyright on any CRS report we have republished.