

**LEAD HAZARD CONTROL AND HEALTHY HOMES
LEAD HAZARD REDUCTION
2015 Summary Statement and Initiatives
(Dollars in Thousands)**

LEAD-BASED PAINT HAZARD REDUCTION PROGRAM	<u>Enacted/ Request</u>	<u>Carryover</u>	<u>Supplemental/ Rescission</u>	<u>Total Resources</u>	<u>Obligations</u>	<u>Outlays</u>
2013 Appropriation	\$120,000	\$7,622	-\$6,277	\$121,345	\$117,281	\$124,519
2014 Appropriation/Request	110,000	3,804	...	113,804	113,804	128,000
2015 Request	<u>120,000^a</u>	<u>...</u>	<u>...</u>	<u>120,000</u>	<u>120,000</u>	<u>129,000</u>
Program Improvements/Offsets	+10,000	-3,804	...	+6,196	+6,196	+1,000

a/ This number includes an estimated Transformation Initiative (TI) transfer that may be up to 0.5 percent or \$15 million, whichever is less, of Budget Authority.

1. What is this request?

The Department requests \$120 million for the Lead Hazard Control and Healthy Homes programs in fiscal year 2015, which is \$10 million above the fiscal year 2014 appropriation. The total budget request for fiscal year 2015 comprises the following budget components:

- Lead Hazard Control Program: \$93 million;
- Healthy Homes Program: \$25 million; and
- Lead Technical Studies and Programmatic Support: \$2 million.

The Department will continue the successful lead hazard control and healthy homes programs by targeting the worst-quality low-income housing that threatens the health and safety of low-income families, children, and other vulnerable populations. This request will ensure that over 11,000 families are protected from housing conditions that have been scientifically shown to negatively impact occupant health and safety, including mold and moisture intrusion, lead paint, radon, carbon monoxide, and pest infestations. In particular, the Department will advance its accomplishments in reducing the extent of childhood lead poisoning, which most affects children in poor and minority families.

The funding for the lead hazard control and technical support activities will be used to protect children against lead exposure targeting the highest risk properties for priority action, ensure that lead-safe practices are followed during renovation, repair and painting of pre-1978 homes, and eliminate lead—based paint hazards in as many pre-1978 homes as feasible. Of homes with lead-

Lead Hazard Reduction

based paint hazards, 1.1 million are low-income households with one or more children under age 6.¹ HUD has aligned its activities with the Department of Health and Human Services' (HHS') Healthy People 2020 Environmental Health objective 8.2, to "Reduce the mean blood lead levels in children" aged 1 to 5 years from HHS' baseline of 1.5 µg/dL over the 2005–08 period, to HHS' target for 2020 of 1.4 µg/dL.²

Data from the American Housing Survey³ and the American Healthy Homes Survey⁴ indicate that over 30 million U.S. housing units have significant physical problems, lead paint hazards, radon, or other health and safety hazards that place their occupants at risk for illnesses and injuries. Funding this program will reduce the number of lead poisoned children and protect families by targeting housing-related health hazards in nearly 11,000 low-income homes with significant lead and/or other residential health and safety hazards, which research indicates will reduce medical costs and improve quality of life by reducing lost days at work due to illness and injury caused by unsafe housing conditions, and reducing children's lost school days. These funds will reduce the exposure by young children – particularly those most at risk – to lead-contaminated paint chips, dust and soil. This will, therefore, decrease the blood lead level in these children, and over time, continue the significant progress aimed at eliminating lead hazard threats to children. The program has been extremely successful in cost-effectively reducing lead poisoning and other environmental housing-related hazards that affect the health of children and families.

HUD expects the following outcomes as part of this work:

- Reduction in the average blood-lead level of children under age 6, in accordance with the Department of Health and Human Services' Healthy People 2020 objective.⁵
- Reduction, as a result of the housing repair work conducted, in the number of homes with moderate or severe physical hazards as determined by the American Housing Survey.⁶
- Improved asthma control among children through multifaceted interventions that include mitigation of indoor asthma triggers.
- Increased number and percentage of new and existing homes with radon-reducing features, especially in high radon areas.
- Increased percentage of homes with working carbon monoxide (CO) and smoke alarms.
- Increased percentage of smoke-free homes, including in HUD-assisted housing.

¹ portal.hud.gov/hudportal/documents/huddoc?id=AHHS_Report.pdf; Cox et al. 2014 (submitted).

² www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicId=12.

³ www.census.gov/programs-surveys/ahs/data/2011/h150-11.html.

⁴ portal.hud.gov/hudportal/documents/huddoc?id=AHHS_Report.pdf.

⁵ www.healthypeople.gov, *op. cit.*

⁶ www.census.gov; *op. cit.*

Lead Hazard Reduction

Salaries and Expenses (S&E) and Full-Time Equivalent (FTE) Request

The OLHCHH is requesting 58 FTE in fiscal year 2015, an increase of 6 FTE from fiscal year 2014. The increase in FTEs will ensure that the OLHCHH has adequate staff to provide technical assistance and program oversight to the expected increase in grants to communities for the control of lead-based paint hazards and other health and safety hazards in housing. Total S&E funding is \$7.88 million, which is an increase of \$879 thousand from the \$7 million fiscal year 2014 enacted. Personnel services funding is \$7.63 million, which is an increase of \$879 thousand from the \$6.75 million fiscal year 2014, reflecting the cost of salary and fringe benefits. Non-personnel services are the same as the fiscal year 2014 amount of \$254 thousand. Please see the justification 'Office of Lead Hazard Control and Healthy Homes' for further details.

2. What is this program?

The mission of the Office of Lead Hazard Control and Healthy Homes (OLHCHH) is to provide safe and healthy homes for at-risk families and children by promoting and funding housing repairs to address conditions that threaten the health of residents. As part of this mission, the OLHCHH is involved in coordinating disparate health and housing agendas, supporting key research, targeting enforcement efforts, and providing tools to build sustainable local programs that mitigate housing-related health hazards. The OLHCHH assists states and local governments in remedying unsafe housing conditions and addressing the acute shortage of decent and safe dwellings for low-income families.

Lead Hazard Control

For fiscal year 2015, the Department requests \$93 million for Lead Hazard Control programs; yielding an estimated 7,000 housing units made lead-safe. The OLHCHH's Lead Hazard Control programs currently include both the Lead Based Paint Hazard Control (LBPHC) and Lead Hazard Reduction Demonstration (LHRD) grant programs. Although they are similar in their overall goal of producing lead-safe homes for low-income residents; the LHRD grant program is focused, in accordance with the annual HUD Appropriations Acts, on jurisdictions with higher numbers of pre-1940 rental housing and higher rates of childhood lead poisoning cases. These programs are authorized under Section 1011 of the Residential Lead-Based Paint Hazard Reduction Act of 1992 (Title X of the Housing and Community Development Act of 1992; Public Law 102-550; 42 U.S.C. 4852). Funding assists states, Native American Tribes, cities, counties/parishes, or other units of local government to identify and eliminate lead-based paint hazards in low- and very low-income private housing where children under 6 years of age reside or are likely to reside.

Healthy Homes

For fiscal year 2015, the Department requests \$25 million for Healthy Homes programs; yielding an estimated 4,000 housing units made safe and healthy, and supporting studies of the impacts that health-related housing repairs (beyond those related to lead, which are evaluated separately) have on health. These funds fill a critical need by assisting cities, states, other units of local

Lead Hazard Reduction

government and not-for-profit organizations to make housing repairs to target housing that reduces or eliminates significant health and safety hazards. Unlike the lead hazard control programs, the Healthy Homes programs goes beyond just addressing lead-based paint hazards and covers other serious threats to residents' health and safety. No other federal grant program directly targets homes that threaten the health and safety of residents. In addition, at the requested funding level, HUD will award healthy homes supplemental funds, up to \$200,000 per recipient, to fiscal year 2015 Lead-Based Paint Hazard Control Grant Program recipients who request and qualify for such funding. The supplement will ensure that critical housing-related hazards are addressed simultaneously in homes being made lead safe under that program, and help build up the communities' infrastructure for addressing a broad range of housing-related health and safety hazards efficiently. The Healthy Homes Production Program targets those housing conditions that have been scientifically shown to negatively impact occupant health and safety, including mold and moisture intrusion, lead paint, radon, carbon monoxide, and pest infestations. Lifetime returns on investments in asthma prevention programs similar to those operated by HUD have been conservatively estimated by a CDC Task Force as a providing a benefit-cost ratio of 5.3 (range of 5.3 to 14.0).⁷ Applying that ratio to the \$40 million devoted to asthma control by HUD's healthy homes program since its inception in FY 1999 would indicate a benefit of at least \$212 million. The Healthy Homes programs are authorized under Sections 501 and 502 of the Housing and Urban Development Act of 1970 (12 U.S.C. 1701z-1 and 1701z-2).

Over the past several years, the importance of the housing stock to the nation's economy has become increasingly evident. Homes and health are inextricably linked together, reflect two of the most basic needs of a society, and serve as an indicator of the strength of the nation. The fact that improved housing quality results in improved health has been accepted since the mid-19th century (Lowry, 1991). Substandard housing affects communities through wealth depletion, an increase in abandoned properties, and housing instability. While unhealthy and unsafe housing continues to affect the health of millions of people from all income levels, geographic areas, and walks of life, susceptible and vulnerable populations, such as children, the poor, minorities, and people with chronic medical conditions are disproportionately impacted by inadequate housing. Furthermore, low-income persons are more likely to lack resources for preventive measures in the home, and deferred maintenance can lead to the development and persistence of residential health hazards. Improving housing quality can have a dramatic effect on the health of residents.

Technical Studies and Programmatic Support

For fiscal year 2015, the Department requests \$2 million for Lead Technical Studies and Programmatic Support. The requested funding will continue the significant progress we have made to further our understanding of housing conditions and their connection to residents' health, but also for identifying effective interventions and preventive measures, and demonstrating health benefits of targeting interventions to reduce or eliminate health hazards in homes. The OHHLHC's lead technical studies and programmatic support activities include:

⁷ Nurmagambetov et al., 2011; [www.ajpmonline.org/article/S0749-3797\(11\)00320-5/](http://www.ajpmonline.org/article/S0749-3797(11)00320-5/) (also available at www.thecommunityguide.org/asthma/supportingmaterials/Asthma%20Econ.pdf).

Lead Hazard Reduction

- Conducting technical studies and demonstration projects to identify innovative methods that reduce the cost and increase the effectiveness of lead hazard control and other housing-related health hazard remediation activities;
- Providing technical support, public education and outreach on environmental health and safety issues in the home to state and local governments, the general public, the professional community, and trade groups;
- Collaborating with EPA to operate a toll-free hotline and document distribution center for the general public;
- Partnering via Interagency Agreements with other federal partners to implement a comprehensive federal strategy to promote healthy homes;
- Training to expand the use of a standardized risk assessment method that identifies and prioritizes housing conditions that pose serious threats to vulnerable low-income residents; and
- Developing grants management tools and mechanisms for standardized reporting, tracking, and evaluating progress compared to established performance benchmarks.

The OLHCHH programs have a demonstrated history of success, filling critical needs in communities where no other resources exist to address substandard housing that threatens the health of the most vulnerable residents. These efforts include:

- HUD, through its Lead Hazard Control and Healthy Homes programs, continues to be a national leader in the effort to eliminate lead poisoning in children nationwide as a major public health problem. Low-income residential units made lead-safe and healthy by HUD's grant programs are supplemented by units remediated by its regulatory enforcement actions, through our innovative public-private partnerships like the Safe and Healthy Homes Investment Partnership (SHHIP) program, and through collaborative efforts with other federal agencies such as the Department of Energy, under its Weatherization Plus Health initiative.
- As part of implementing the federal Hurricane Sandy Rebuilding Strategy, the OLHCHH convened and chaired the interagency Indoor Environmental Pollutants Working Group, which consolidated agencies' guidance on mold, lead paint, radon, and asbestos.⁸
- The OLHCHH is playing a leadership role in implementing the Coordinated Federal Action Plan to Reduce Asthma Disparities,⁹ with a focus now on instituting and promoting policies and practices for housing interventions to control asthma triggers in both federally assisted and non-assisted low-income housing.
- The OLHCHH organized and managed the development of the overall federal healthy homes strategic plan, Advancing Healthy Housing – A Strategy for Action.¹⁰ The Strategy for Action presents a vision for addressing the nation's health and

⁸ portal.hud.gov/hudportal/documents/huddoc?id=HSRebuildingStrategy.pdf.

⁹ www.epa.gov/childrenstaskforce/federal_asthma_disparities_action_plan.pdf.

¹⁰ portal.hud.gov/hudportal/HUD?src=/program_offices/healthy_homes/advhh.

Lead Hazard Reduction

economic burdens caused by preventable hazards associated with the home, and outlines the pathway for federal agencies to take coordinated preemptive actions that will help reduce the number of American homes with health and safety hazards. The Strategy was developed by the federal Healthy Homes Work Group, chaired by HUD, specifically, by the OLHCHH, and the Work Group is monitoring its implementation.

These programs directly support two of HUD's 5 Strategic Plan 2010-2015 goals: Subgoal 3b—Utilize HUD assistance to improve health outcomes; and Subgoal 4b—Promote energy-efficient buildings and location efficient communities that are healthy, affordable, and diverse. The OLHCHH programs directly underpin Subgoal 3b through targeted housing interventions to reduce the severity and prevalence of asthma in children, and Subgoal 4b by reducing the number of homes in the United States with significant environmental health and safety hazards such as mold and moisture, lead-based paint, poor indoor air quality, radon, and pest infestations.

3. Why is this program necessary and what will we get for the funds?

OLHCHH programs have contributed substantially to the reduction in childhood lead poisoning cases from the early 1990s to today (CDC, 2005; CDC 2012), because the most important preventable exposure sources for children are lead hazards in their residential environment: deteriorated lead paint, house dust, and lead-contaminated soil. Low-income, black, and Hispanic children are at higher risk (CDC, 2005a). Multivariate analysis indicates that residence in older housing, poverty, age, and being Hispanic or black are still major risk factors for higher lead levels. In May 2012, based on an extensive review of research on the health effects of lead, the CDC redefined the level at which children are considered to have too much lead in their blood in January 2012, from a "level of concern" (a blood lead level of 10 micrograms of lead per deciliter of blood ($\mu\text{g}/\text{dL}$) in a child under age 6) to a new "blood lead reference range value" based on the distribution of blood lead levels among U.S. children under age 6. The blood level cutoff, now for the top 2.5 percent of these children rather than set at a fixed value (CDC ACCLPP, 2012; CDC, 2012), went down. The halving of the threshold (from 10 to 5 $\mu\text{g}/\text{dL}$) in response to the health research increased the number of children considered to have too much lead in their bodies from less than 100,000 to about 535,000. The number of young children with 5 $\mu\text{g}/\text{dL}$ or more of lead in their blood would have been higher, over 800,000 children, had not HUD's lead hazard control grants and healthy homes programs controlled hazards in over 370,000 housing units since the programs' inception.

Because lead-based paint hazards are the primary source of childhood exposure to lead in the U.S, and because lead paint is present in one-third of the nation's dwellings,¹¹ continued investment is needed to reduce lead hazards in older homes. This funding will be used to protect children against lead exposure by targeting the highest risk properties for priority action, to ensure that lead-safe practices are followed during renovation, repair and painting of pre-1978 homes, and to eliminate lead-based paint hazards in as

¹¹ portal.hud.gov/hudportal/documents/huddoc?id=AHHS_Report.pdf; Cox et al. 2014 (submitted)

Lead Hazard Reduction

many pre-1978 homes as feasible. Of homes with lead-based paint hazards, 1.1 million are low-income households with one or more children under age 6.¹²

HUD has aligned its activities with the Department of Health and Human Services' (HHS') Healthy People 2020 Environmental Health objective 8.2, to, "Reduce the mean blood lead levels in children" aged 1 to 5 years from HHS' baseline of 1.5 µg/dL over the 2005–08 period, to HHS' target for 2020 of 1.4 µg/dL.¹³ To maintain progress made and reduce remaining disparities, efforts must continue to test children at high risk for lead poisoning, and identify and control sources of lead. Coordinated prevention strategies at national, state, and local levels will help achieve the goal of eliminating lead poisoning in children. The OLHCHH's lead hazard control grants and lead regulatory enforcement efforts will reduce the exposure by young children – particularly those most at risk – to lead-contaminated paint chips, dust and soil. This will, therefore, reduce the blood lead level in these children, and, over time, contribute to moving the national distribution of children's blood lead values downward.

Unhealthy and unsafe housing continues to affect the health of millions of people from all income levels, geographic areas, and walks of life in the United States; however, these hazards disproportionately impact children, the poor, minorities, people with medical conditions, people with disabilities, and older adults. In addition to lead hazards, discussed above, the following housing-related hazards are of particular importance:

- According to the most recent data available, more than 6.8 million housing units have radon exposures above the current EPA action level; radon causes 21,000 deaths per year from lung cancer attributable to this preventable hazard (Environmental Protection Agency, 2003).
- Approximately 17 million homes have elevated levels of 4 or more allergens, which have been associated with symptoms among residents with allergic asthma (Department of Housing and Urban Development, 2009).

The Cost Burden of Unhealthy Housing

Researchers estimate that the health effects of poor housing conditions could cost billions of dollars annually in healthcare for asthma, lead-based paint poisoning and injury, as well as lost productivity in the labor force (Landrigan, Schechter, Lipton, Fahs and Schwartz, 2002). Reductions in the Lead Hazard Reduction funding would impact the OLHCHH's ability to reduce these costs through housing repairs and to provide safe, decent and sanitary homes for the most at-risk American families. The OLHCHH programs play an important part in reducing the nation's health care costs.

¹² *Ibid.*

¹³ www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicId=12.

Lead Hazard Reduction

- A 2011 study of the total annual costs of pediatric disease in American children estimated that the total cost of lead poisoning in 2008 was \$50.9 billion (Trasande and Liu, 2011).
- Besides the physical toll an at-risk home can have on its inhabitants (e.g., unnecessary emergency room visits annually due to housing related injuries and illness), some research suggests that the cumulative financial burden of unhealthy homes for the nation is considerable. For example, one study estimates the total (direct and indirect) cost for unintentional injuries in the home is over \$200 billion annually, with \$90 billion of that due to falls alone (Zaloshnja, Lawrence, and Romano, 2005). Nearly 30 percent of residential injuries among children in a randomized controlled trial were found to be preventable through interventions (Phelan, Khoury, Xu, Liddy, Hornung, and Lanphear, 2011). If the same proportion of preventable injuries were found for adults, the annual cost of preventable injuries in the home would be about \$60 billion.
- One study finds that the costs for asthma due to one root cause in the home - dampness and mold - could be \$3.5 billion annually (Mudarri and Fisk, 2007). Other modifiable childhood asthma risk factors within the home (e.g., pet dander, cockroach allergen, use of stove or oven for home heating) were estimated to cost nearly \$1 billion (Lanphear, Aligne, Auinger, Weitzman, Byrd, 2001).
- Using EPA survey data, HUD estimates that childhood lead exposures cost over \$55 billion in 2008 (reflecting inflation from the EPA-estimated cost for 2000) for direct medical costs and indirect costs due to future lost productivity and earnings resulting from cognitive impairment, with the majority of childhood lead poisoning attributable to exposure to lead-based paint hazards in the home. That EPA assessment noted that a major source of exposure was due to dust exposures from lead-based paint in the home. A more-recent study reached a similar conclusion, estimating that 70 percent of lead poisonings were from that source of exposure (Gould, 2009).

The potentially high health-related costs of unsafe housing are matched by significant and enduring social costs. Researchers find a clear relationship between elevated blood lead among children and their cognitive and behavioral impairment. "Even low levels of exposure appear to lower children's IQ, which increases the need for enrollment in special education services, reduces the likelihood of high school and college graduation, lowers lifetime earnings (both through educational and IQ pathways), and greatly increases their propensity to engage in violent criminal activity" (Gould, 2009).

Funds from the OHHLHC grant programs help to sustain and enhance the efforts of local communities to address the critical needs they face in providing decent, safe and sanitary housing for their citizens. While HUD has expanded the scope and network of successful local programs, if it fails to maintain these programs, it runs the risk of losing momentum and slipping behind the Departmental our goals to protect children and families, potentially leaving thousands of low-income families to live in housing that threatens their health, and often their lives, with unsafe and unhealthy housing conditions.

4. How do we know this program works?

OLHCHH programs have contributed substantially to reducing childhood lead poisoning cases from the early 1990's to today. The prevalence of elevated blood lead levels in children under age 6 that are at least 10 micrograms per deciliter (≥ 10 mg/dl) decreased from 8.6 percent in 1988-1991 to 0.75 percent in 2003-2010, a 91 percent decline, according to the on-going National Health and Nutrition Examination Survey (NHANES) conducted by the CDC.¹⁴ HUD's lead hazard control grants have contributed to this decline¹⁵ in the more than 180,000 housing units treated under the program. Recently, CDC replaced the use of the concept of a "level of concern" with a population-based "reference value," which is currently 5 $\mu\text{g/dL}$. As discussed in section 3, above, this has highlighted the number of children considered to have elevated blood lead levels, around 535,000 (CDC, 2012;¹⁶ Advisory Committee on Children Lead Poisoning Prevention, 2012¹⁷). In addition, the OHHLHC's program funds have contributed to the understanding of housing conditions and their connection to residents' health; identified effective interventions and preventive measures; and demonstrated the health benefits of targeting interventions to reduce or eliminate health hazards in homes. For example:

- Peer-reviewed research in the National Evaluation of HUD's Lead Hazard Control Grant Program, which was a formal, prospective study for up to 12 years, funded by HUD from 3 years of HUD's lead hazard control grants, demonstrated that the controls used in those grants are effective in reducing lead hazards for at least 6 years, and in reducing blood lead levels. (See, for example, Dixon et al., 2004; Clark et al., 2004a; Clark et al., 2004b; Dixon et al., 2005; Wilson et al., 2006; Clark et al., 2011.)
- The State of Michigan used OLHCHH Healthy Homes Program funds to pilot an in-home, housing-related hazard reduction program for low-income families in Lansing, Michigan, which resulted in a substantial reduction in the impact of asthma on children in the pilot project. Documented results included significant reductions in such metrics as unscheduled visits to healthcare providers, emergency department visits, hospitalizations, and missed school days due to asthma.
- The City of San Diego used OLHCHH Healthy Homes Program funds to remediate 228 units including mold and cockroach reduction, which resulted in a substantial reduction in hospitalizations/urgent care and asthma symptom days.

¹⁴ www.cdc.gov/nchs/nhanes.htm; www.cdc.gov/mmwr/preview/mmwrhtml/00048339.htm; www.cdc.gov/mmwr/preview/mmwrhtml/mm6213a3.htm?s_cid=mm6213a3_e.

¹⁵ www.sciencedirect.com/science/article/pii/S0013935110001842

¹⁶ www.cdc.gov/nceh/lead/ACCLPP/CDC_Response_Lead_Exposure_Recs.pdf.

¹⁷ www.cdc.gov/nceh/lead/ACCLPP/Final_Document_030712.pdf.

Lead Hazard Reduction

- A randomized controlled trial funded with OLHCHH Healthy Homes Program funds in Cleveland, OH (Cuyahoga County and Case Western Reserve University) demonstrated significant improvement in asthma symptoms, including such metrics as reduced acute care usage, among children following remediation focusing on mold and moisture problems in their homes.
- In Seattle, WA, an OLHCHH Healthy Homes Program grant to non-profit "Neighborhood House" and partners was used to upgrade 35 green-built public housing units (built through HUD's HOPE VI Program) to "Breathe Easy Homes" with special features to improve indoor air quality and reduce indoor asthma triggers. Asthmatic children that were moved into these homes experienced significant improvements in asthma symptoms, including such metrics as a reduced need for acute medical care.

The cost-effectiveness of lead and healthy homes interventions similar to those used by our grantees is well-documented by research:

- A 2011 study of childhood lead poisoning suggested that it accounted for, annually, \$5.9 billion in medical costs and \$50.9 billion in lost productivity due to cognitive impairment in 2008 (Trasande and Liu, 2011). As noted above, based on estimates of health benefits, the value of lead hazard control programs similar to those operated by HUD is conservatively estimated at \$30.6 billion based on the cost/benefit ratio of at least 17:1 (Gould, 2009).
- A study of the costs of childhood asthma from man-made environmental sources, both indoors and outdoors, as estimated at \$7 billion in direct and indirect costs in 2008 (Trasande et al, 2011). Outdoor sources are important to consider in the healthy homes context; poorly maintained and inadequately sealed homes will permit higher infiltration rates of outdoor air into the home. Exposure to dampness and mold in homes alone is projected by some researchers to contribute to approximately 21 percent of current asthma cases in the United States, at an annual cost of \$3.5 billion (Mudarri and Fisk, 2007). The side effects include 10 million lost school days and 2 million emergency room visits every year (National Institutes of Health, 2007). Another study suggests that for every \$1 spent on asthma reduction programs (although not necessarily those funded by the OHHLHC), there is a \$5.30-\$16.50 return on investment (Nurmagambetov et al, 2011).
- Minor to moderate remediation of housing hazards attributed to asthma, such as reducing interior moisture and improving indoor air quality, results in a substantial return for money invested. Following the National Asthma Education Prevention Program's (NAEPP) Expert Panel Report 3 (EPR3) guidelines concerning the need for environmental control measures for asthma, the Connecticut Department of Public Health conducted a study to explore the cost-effectiveness of housing interventions (although not necessarily those funded by the OHHLHC) directed at mitigating conditions that exacerbated asthma. Net savings at 6 months follow-up were estimated at \$267 per participant due to decreases in unscheduled acute care visits for adults and children (Kimberly H. Nguyen, Eileen Boulay, & Justin Peng, 2010).

Lead Hazard Reduction

- Falls are the leading cause of non-fatal injuries for all children ages 0 to 19 and for adults 65 years of age or older (Home Safety Council, 2004). Every day, approximately 8,000 children are treated in U.S. emergency rooms for fall-related injuries. This approaches three million children each year. Research suggests that the total direct and indirect costs for unintentional injuries (e.g., falls, poisonings, fires) in the home have averaged over \$200 billion annually (Zaloshnja et al, 2005; Home Safety Council, 2004) with falls alone responsible for half of those costs (Home Safety Council, 2004). In 2000, the total direct cost of all fall injuries for people 65 and older exceeded \$19 billion. The financial toll for older adult falls is expected to increase as the population ages. Research suggests that fire and burn injuries represent 1 percent of the incidence of injuries and 2 percent of the total costs of injuries, or \$1.3 billion each year; representing 6 percent of the total costs of all fatal injuries. According to the Home Safety Council (Home Safety Council, 2002), installing a smoke detector at an average inflation-adjusted cost of \$43 produces \$1,217 in benefits to the U.S. society. Exposure to radon gas in the home is attributed to 21,000 radon-related lung cancer deaths annually, resulting in an inflation-adjusted amount of \$2.9 billion in direct and indirect costs (Mason, 2010; U.S. EPA, 2003).

Program Improvements through Information Technology Investments

With the deployment of a new OLHCHH grants management cloud computing system in fiscal year 2014, staff and grantees alike have access to tools for planning, reporting, and evaluation. The use of cloud services for the OLHCHH grants program has reduced the use of HUD servers and increased the stability of the system, has made it more accessible to grantees, and has reduced maintenance and operational costs.

5. Legislative and Regulatory Proposals

HUD is submitting the following legislative proposal as a General Provision to streamline operations and make them more effective in protecting the health and safety of families, especially children:

- HUD is requesting subpoena authority for the Lead Disclosure Statute (42 U.S.C. 4852d(a)), eliminating a statutory gap in order to allow HUD to obtain documents from rental housing owners suspected of violating this statute, which provides information to families renting or buying older (pre-1978) homes that may have lead-based paint. This relates to owners who have been recalcitrant in providing them in response to requests from the Department. While HUD and EPA have joint authority for enforcing the statute, only EPA has the authority to issue subpoenas, which it has under the Toxic Substances Control Act (15 U.S.C. § 2610(c)), an EPA authority unavailable to HUD. This legislative proposal would provide HUD with its own subpoena authority, which will allow HUD to conduct these investigations in a more timely and efficient manner than it can currently.

Lead Hazard Reduction

The subpoena authority authorization is budget-neutral. Once the statutory amendment is enacted, the OLHCHH will begin the regulatory development to implement the legislation.

HUD is also planning to submit a consolidated legislative proposal later in fiscal year 2014 to update program standards and definitions regarding housing-related health and safety hazards.

Lead Hazard Reduction

**LEAD HAZARD CONTROL AND HEALTHY HOMES
LEAD HAZARD REDUCTION
Summary of Resources by Program
(Dollars in Thousands)**

<u>Budget Activity</u>	<u>2013 Budget Authority</u>	<u>2012 Carryover Into 2013</u>	<u>2013 Total Resources</u>	<u>2013 Obligations</u>	<u>2014 Budget Authority/ Request</u>	<u>2013 Carryover Into 2014</u>	<u>2014 Total Resources</u>	<u>2015 Request</u>
Lead Hazard Control								
Grants	\$55,917	\$5,603	\$61,520	\$58,332	\$47,000	...	\$47,000	\$93,000
Technical Studies	2,500	964	3,464	2,969	3,000	\$3,573	6,573	2,000
Healthy Homes	17,303	1,055	18,358	17,977	15,000	231	15,231	25,000
Lead Hazard Reduction								
Demonstration	38,003	...	38,003	38,003	45,000	...	45,000	...
Transformation								
Initiative (transfer)	...	...	...	...	...	...	...	[600]
Total	113,723	7,622	121,345	117,281	110,000	3,804	113,804	120,000

**LEAD HAZARD CONTROL AND HEALTHY HOMES
LEAD HAZARD REDUCTION
Appropriations Language**

The fiscal year 2015 President's Budget includes proposed changes in the appropriation language listed and explained below. New language is italicized and underlined and language proposed for deletion is bracketed.

For the Lead Hazard Reduction Program, as authorized by section 1011 of the Residential Lead-Based Paint Hazard Reduction Act of 1992, [~~\$110,000,000~~] *\$120,000,000*, to remain available until September 30, [2015] *2016*: *Provided*, That up to [~~\$15,000,000~~] *\$25,000,000* of that amount shall be for the Healthy Homes Initiative, pursuant to sections 501 and 502 of the Housing and Urban Development Act of 1970 that shall include research, studies, testing, and demonstration efforts, including education and outreach concerning lead-based paint poisoning and other housing-related diseases and hazards: *Provided further*, That for purposes of environmental review, pursuant to the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) and other provisions of the law that further the purposes of such Act, a grant under the Healthy Homes Initiative, or the Lead Technical Studies program under this heading or under prior appropriations Acts for such purposes under this heading, shall be considered to be funds for a special project for purposes of section 305(c) of the Multifamily Housing Property Disposition Reform Act of 1994: [*Provided further*, That of the total amount made available under this heading, \$45,000,000 shall be made available on a competitive basis for areas with the highest lead paint abatement needs: *Provided further*, That each recipient of funds provided under the third proviso shall make a matching contribution in an amount not less than 25 percent: *Provided further*, That each applicant shall certify adequate capacity that is acceptable to the Secretary to carry out the proposed use of funds pursuant to a notice of funding availability:] *Provided further*, That amounts made available under this heading in this or prior appropriations Acts, and that still remain available, may be used for any purpose under this heading notwithstanding the purpose for which such amounts were appropriated if a program competition is undersubscribed and there are other program competitions under this heading that are oversubscribed. (*Department of Housing and Urban Development Appropriations Act, 2014.*)