

**LEAD HAZARD CONTROL AND HEALTHY HOMES
LEAD HAZARD REDUCTION
2016 Summary Statement and Initiatives
(Dollars in Thousands)**

LEAD-BASED PAINT HAZARD REDUCTION PROGRAM	Enacted/ Request	Carryover	Supplemental/ Rescission	Total Resources	Obligations	Outlays
2014 Appropriation	\$110,000	\$9,432 ^{a/}	...	\$119,432	\$117,457	\$122,030
2015 Appropriation	110,000	1,946	...	111,946	111,946	123,000
2016 Request	<u>120,000^b</u>	...	...	<u>120,000</u>	<u>120,000</u>	<u>122,000</u>
Program Improvements/Offsets	+10,000	-1,946	...	+8,054	+8,054	-1,000

a/ The carryover into fiscal year 2014 includes \$5.627 million of actual recaptures.

b/ This number includes an estimated transfer to the Transformation Initiative (TI) account of \$912 thousand of Budget Authority.

1. What is this request?

The Department requests a total of \$120 million for the Lead Hazard Control and Healthy Homes Grant Programs in fiscal year 2016, a \$10 million increase from the fiscal year 2015 enacted.

This request includes funding for the following:

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

HUD grants will be provided to local and state governments, and eligible nonprofit entities, to enable them to eliminate lead paint and other housing-related health hazards in low-income privately owned dwellings. Unlike housing rehabilitation programs, which focus on renovations without health and safety as a primary concern, the lead hazard control and healthy homes programs are intentionally focused on making homes safer for children and families to live in using established assessment methods that are addressed with cost-effective interventions. Poor housing conditions, such as a dilapidated structure; roofing problems; heating, plumbing, and electrical deficiencies; water leaks and intrusion; carbon monoxide; damaged lead paint; and radon gas are associated with a wide range of health conditions, including unintentional injuries, respiratory illness, asthma, lead poisoning, and cancer, respectively.ⁱ Large benefit-cost ratios have been demonstrated for reducing health and safety hazards through housing

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interventions similar to those used by HUD. For example, studies suggest that each dollar invested in lead paint hazard control results in a return of \$17–\$221,ⁱⁱ reducing household allergy-inducing substances (allergens), a return of \$5.30-\$16.50,ⁱⁱⁱ and installing battery-operated smoke alarms, a return of \$18.^{iv} Research projects in this area conducted by HUD have been practical in nature, demonstrating the health benefits of targeted interventions to reduce or eliminate health hazards in homes, and determining the prevalence of these hazards in order to help direct program efforts towards those most prevalent in HUD-associated housing.

Inadequate housing is defined by the Census Bureau as an occupied housing unit that has moderate or severe physical problems (e.g. deficiencies in plumbing, heating, electricity, hallways and upkeep). In this context, CDC has defined unhealthy housing as the presence of any additional characteristics that might negatively affect the health of its occupants, including evidence of rodents, water leaks, peeling paint in homes built before 1978, and absence of a working smoke detector.

While unhealthy and inadequate housing continues to affect the health of millions of Americans from all income levels, geographic areas, and walks of life,^v susceptible and vulnerable populations, such as children, the poor, minorities, individuals with behavioral health issues, and people with chronic medical conditions, are disproportionately impacted by inadequate housing.^{vi,vii,viii} In most cases, the Lead Hazard Control and Healthy Homes Grant Programs provide the only federal financial resources available to communities to make such dwellings safe and healthy for residents, especially children. Funding these programs will:

- Eliminate lead-based paint and other housing-related health hazards in nearly 12,000 low-income homes;
- Reduce the number of lead poisoned children in high risk communities;
- Based on studies of similar interventions, 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. ix,x,xi,xii

This request includes a legislative proposal as a General Provision regarding subpoena authority that is summarized at the end of this document.

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.

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Lead Hazard Control

For fiscal year 2016, 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 2016, 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 remediation (beyond repairs related to lead, which are evaluated separately) have on health, and on developing and evaluating cost-effective methods for these remediations. This funding also supports training and public education programs that help state, local and nongovernmental agencies, housing industry stakeholders, and the general public understand the health- and housing relationship and how housing related health and safety hazards can be identified and addressed (totaling an included \$1.5 million). These funds fill a critical need by assisting cities, states, other units of local government, and not-for-profit organizations to make repairs that reduce or eliminate significant housing-related 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 \$250,000 per grantee, to fiscal year 2016 Lead Hazard Control Grant recipients who request and qualify for such funding to housing-related health and safety hazards in homes in which lead hazard control work is being conducted under a lead hazard control grant, as described above. The supplement will ensure that critical housing-related hazards are addressed simultaneously in homes being made lead safe under that program, help build up the communities' infrastructure for addressing a broad range of housing-related health and safety hazards efficiently, and leverage the grantees' organizational infrastructure for their lead hazard control grant activities to efficiently address these additional housing-related hazards. The Healthy Homes Production Program targets those housing conditions that have been scientifically shown to harm 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).ⁱⁱⁱ Applying that ratio to

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the \$40 million devoted to asthma control by HUD's healthy homes program since its inception in fiscal year 1999 indicates 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 2016, 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, and 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:

- 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 and implementing 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:

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- 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.¹
- The OLHCHH is playing a leadership role in implementing the Coordinated Federal Action Plan to Reduce Asthma Disparities,² 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.³ The Strategy for Action presents a vision for addressing the nation's health and 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.

¹ portal.hud.gov/hudportal/documents/huddoc?id=HSRebuildingStrategy.pdf.

² www.epa.gov/childrenstaskforce/federal_asthma_disparities_action_plan.pdf.

³ portal.hud.gov/hudportal/HUD?src=/program_offices/healthy_homes/advhh.

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 by half, from 10 to 5 $\mu\text{g}/\text{dL}$, in response to health research on the health effects of lower levels of lead in children's blood. The change in the threshold 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,⁴ 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 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 6.⁵

HUD has aligned its lead hazard control and research 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 $\mu\text{g}/\text{dL}$ over the 2005–08 period, to HHS' target for 2020 of 1.4 $\mu\text{g}/\text{dL}$.⁶ 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

⁴ portal.hud.gov/hudportal/documents/huddoc?id=AHHS_Report.pdf; Cox et al. 2014 (submitted)

⁵ *Ibid.*

⁶ www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicId=12.

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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 has 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.

- 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 at 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,

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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.⁷ HUD’s lead hazard control grants have contributed to this decline⁸ 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 range value,” which is currently 5 $\mu\text{g}/\text{dL}$. As discussed in section 3, above, this has increased the number of children considered to have elevated blood lead levels, around 535,000 (CDC, 2012;⁹ Advisory Committee

⁷ 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.

⁸ www.sciencedirect.com/science/article/pii/S0013935110001842

⁹ www.cdc.gov/nceh/lead/ACCLPP/CDC_Response_Lead_Exposure_Recs.pdf.

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on Children Lead Poisoning Prevention, 2012¹⁰). 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:

- A randomized controlled trial in Cleveland, OH (Cuyahoga County and Case Western Reserve University) funded by HUD demonstrated significant improvement in asthma symptoms (including reduced acute care usage) among children following remediation focusing on mold and moisture problems in their homes. During the 12 months of follow-up, the control (non-intervention) group saw an almost 20% higher rate of emergency department visits or hospital in-patient visits than the intervention group. The difference between the two groups was 30 percent from 6 months post-randomization to the end of follow-up.^{xiii}
- In Seattle, WA, a HUD Healthy Homes 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.^{xiv} Children with asthma, who were moved into these homes, experienced a mean of 12.4 asthma symptom-free days per 2 week period after 1 year, compared with 8.6 asthma symptom-free days in the control group. Urgent asthma-related clinical visits in the previous 3 months decreased from 62 percent to 21 percent and the caretakers' quality of life increased significantly. Significant reductions in exposures to mold, rodents, and moisture were reported in the Breathe Easy Homes.
- A program evaluation of the NY State Healthy Neighborhoods Program that provided healthy homes services to over 36,000 residents in 13,120 dwellings in 12 counties across the state found that, among the 22 percent of homes that were randomly reassessed at a follow-up visit, the analysis indicates significant improvements in tobacco control, fire safety, lead poisoning prevention, indoor air quality, and general environmental health and safety (e.g., pests, mold). For residents with asthma, there were significant improvements in the presence of environmental triggers, self-management, and short-term morbidity outcomes, including up to 3.5 fewer days with worsening asthma in a 3-month period.
- In Cuyahoga County, OH (Cuyahoga County Board of Health) and Bellingham, WA (Opportunity Council) grantees partnered with a weatherization program to provide an integrated approach to improve both energy efficiency and indoor environmental quality. These projects demonstrated the benefits of this integrated approach and the Department of Energy is now providing training and encouraging Weatherization Programs to adopt this "weatherization plus health" model.^{xv,xvi}
- Grant-funded projects to the Boston Public Health Commission and the Harvard School of Public Health included Integrated Pest Management (IPM) interventions and related cleaning and educational efforts in private and public housing, as well as limited case management and community health support from trained advocates. In pre-post analyses, significant reductions in a 2-week recall respiratory symptom score were observed, dropping from 2.6 to 1.5 on an 8-point scale ($p = 0.0002$). Reductions in the frequency of wheeze/cough, slowing down or stopping play, and waking at night were also noted.^{xvii}

¹⁰ www.cdc.gov/nceh/lead/ACCLPP/Final_Document_030712.pdf.

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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, as also noted above, 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 OHLHC), 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 guidelines in the National Asthma Education Prevention Program's (NAEPP) Expert Panel Report 3 (EPR3) 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 (similar to those conducted in OLHHC funded projects whether or not the Connecticut projects were funded by the OLHHC 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).
- 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

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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, 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. Enhancements to the system are expected to enable improved evaluation to determine the Return on Investment for grantees' activities in terms of costs for outreach, assessment, intervention, and program evaluation relative to the cost-savings associated with reduced medical costs, lost work days, and/or lost school days for an individual or household served by the programs.

5. Proposals in the Budget

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. (Section 232)

The subpoena authority authorization is budget-neutral. If enacted, the OLHCHH will begin the regulatory development to implement the legislation. HUD will also submit a legislative proposal to update Healthy Homes program standards and definitions and to increase the cost threshold for the Lead Hazard Control Grant program.

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

<u>Budget Activity</u>	<u>2014 Budget Authority</u>	<u>2013 Carryover Into 2014</u>	<u>2014 Total Resources</u>	<u>2014 Obligations</u>	<u>2015 Budget Authority</u>	<u>2014 Carryover Into 2015</u>	<u>2015 Total Resources</u>	<u>2016 Request</u>
Lead Hazard Control								
Grants	\$47,000	\$5,438	\$52,438	\$57,479	\$48,000	\$682	\$48,682	\$93,000
Technical Studies	3,000	386	3,386	2,867	2,000	498	2,498	2,000
Healthy Homes	15,000	608	15,608	14,837	15,000	766	15,766	25,000
Lead Hazard Reduction								
Demonstration	45,000	3,000	48,000	42,274	45,000	...	45,000	...
Transformation								
Initiative (transfer)	...	...	...	...	...	...	...	[912] ^{a/}
Total	110,000	9,432	119,432	117,457	110,000	1,946	111,946	120,000

a/ This number is an estimated transfer to the Transformation Initiative (TI) account of \$912 thousand of Budget Authority.

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LEAD HAZARD CONTROL AND HEALTHY HOMES LEAD HAZARD REDUCTION Appropriations Language

The fiscal year 2016 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, [~~2016~~] *2017: 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, 2015.*)

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