

Sustainability of Funding Toolkit for Childhood Lead Poisoning Prevention Programs

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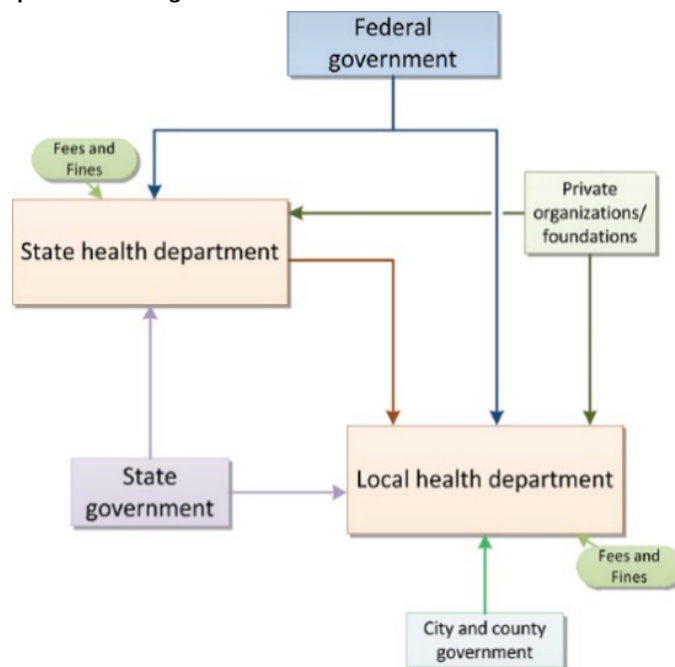
Introduction

Public health services in the United States are largely delivered and regulated by state and local health departments. Successful implementation of these services by health departments is reliant on adequate and sustained sources of funding across all levels of the public health system. However, consistent underfunding of these services has required health departments to creatively diversify funding streams from several sources to maintain their commitment to promote health and protect the lives of people in their communities.

A 2012 report from the Institute of Medicine stated that “the U.S. public health financing structure is broken.”¹ As it currently exists, there are large expenditures for individual care paired with a significant underfunding for public health and prevention efforts, especially in certain programs areas, such as environmental health.¹ Over the past two decades, inflation-adjusted public health spending in the United States has consistently decreased, declining from a peak of 3.2% of the National Health Expenditure in 2002 to 2.7% in 2014. Spending is projected to continue declining to 2.4% by 2023, representing less than 25% of total spending on public health in 2002.² Despite these decreases, the need for dedicated public health funding has been intensifying, as demonstrated by recent health trends and emerging events, including the Flint water crisis in 2014–2015 and the COVID-19 pandemic in 2020.³ The availability of funding for public health is critical to the implementation of successful interventions, as well as the long-term sustainability of public health programs across the United States.

In addition to a gradual reduction in available funding, other funding mechanisms for public health have become increasingly complex as appropriations processes vary at the federal, state, and local levels. The Institute of Medicine’s Committee on Public Health Strategies to Improve Health developed a diagram to demonstrate the complexity of public health funding processes (Figure 1). The purpose of this toolkit is to help state health departments navigate through this challenging financial landscape. It provides information on funding mechanisms available to state health departments to deliver public health services or provide funding to local health departments to deliver these services. While this toolkit focuses on funding from federal agencies, which is a major source of funding for state health departments, other sources of revenue are discussed such as state governments and nongovernmental organizations.¹ These funding sources are often restricted to addressing a single disease or condition, or providing a specific service for the public; therefore, state health departments must rely on multiple sources of diverse funding to cover the entirety of their program activities.

Figure 1: Generalized flow of public health funding through federal, state, and local health departments and governments.



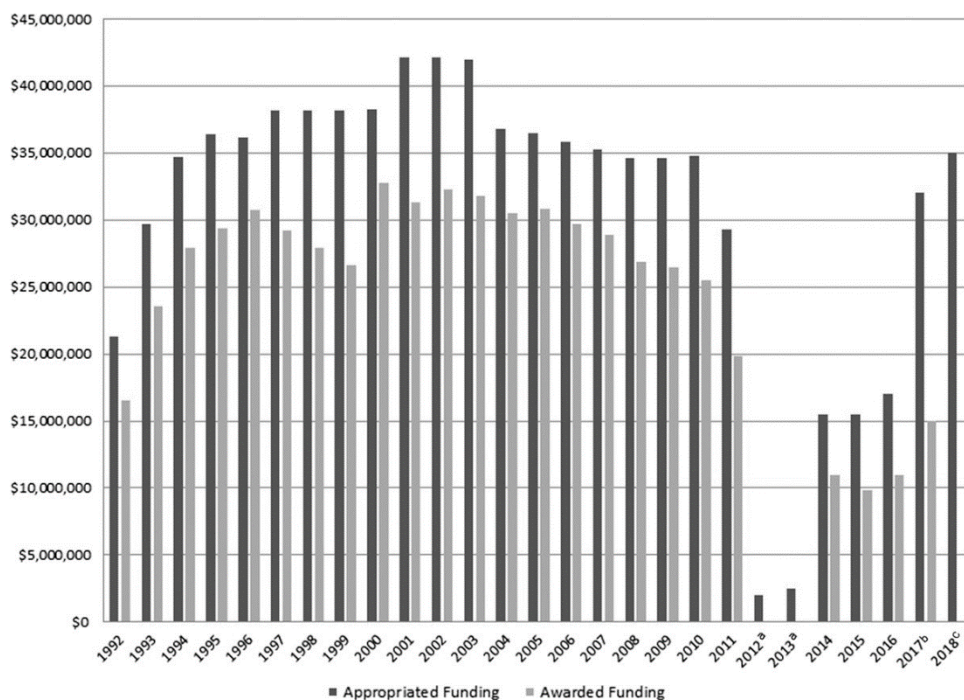
Source: Institute of Medicine. (2012). For the Public's Health: Investing in a Healthier Future. Retrieved from Washington, DC: <https://doi.org/10.17226/13268>

There is no safe level of lead and exposure at a young age can affect nearly every system in a child's body. Elevated blood lead levels (EBLLs) can cause learning disabilities, behavioral problems, damage to the brain and nervous system, and at high concentrations, even seizures, coma, and death.⁴ While there have been substantial declines in population blood lead levels (BLLs) since 1970, approximately 500,000 children between the ages of 1–5 years in the United States have a BLL at or above the Centers for Disease Control and Prevention's (CDC) reference value of 3.5 micrograms per deciliter ($\mu\text{g}/\text{dL}$). This reference level is used to identify children with blood lead levels that are much higher than most children's levels so they can be prioritized for connections to services.

Lead poisoning is completely preventable. State childhood lead poisoning prevention programs (CLPPPs) must be able to fund and provide primary and secondary prevention services that best protect children from lead poisoning. Primary prevention is the goal because it is the most protective, as it includes removal of lead hazards from a child's environment prior to exposure. After a child is exposed to lead, secondary prevention efforts reduce their BLL through continued blood lead testing and follow-up activities.⁵ Unfortunately, there is no single source of funding or revenue that covers all primary and secondary prevention activities.

Funding for primary and secondary lead poisoning prevention has been available from federal, state, and local governments and nongovernmental organizations since the early 1970s. However, like most public health funding, levels of funding for lead poisoning prevention have not matched the needs of state health departments to effectively conduct these activities. For example, CDC CLPPP’s annual congressional appropriation was steadily increasing from \$17 million in fiscal year (FY) 1992 to \$36 million in FY2012 to support lead poisoning prevention efforts from state and local CLPPPs through cooperative agreements. However, congressional funding to CDC CLPPP was reduced to \$2 million in fiscal years 2012 and 2013, severely limiting support for state and local CLPPPs and essentially defunding CDC CLPPP (Figure 2). Consequently, all state and local CLPPP cooperative agreement recipients lost a large portion, if not all, of their total funding for lead poisoning prevention activities and some programs were forced to severely curtail or outright suspend their lead poisoning prevention activities, such as primary prevention efforts and case management for EBLLs. Congressional appropriations for CDC CLPPP were restored to \$13 million in FY2014 and appropriations of approximately \$37 million are anticipated in FY2021, which would restore funding to pre-2012 levels.^{6,7} Even with the recent increases in available funding, CDC CLPPP’s cooperative agreements are the only source of funding for many state CLPPPs. As of FY2020, eight states did not seek funding from CDC CLPPP.⁸

Figure 2: Congressional appropriation for CDC CLPPP, 1992-2018



Source: Ettinger, A. S., Leonard, M. L., & Mason, J. (2019). CDC's Lead Poisoning Prevention Program: A Long-standing Responsibility and Commitment to Protect Children From Lead Exposure. *J Public Health Manag Pract*, 25 Suppl 1, Lead Poisoning Prevention, S5-S12. doi:10.1097/PHH.0000000000000868

The ability to sustain funding is crucial to the long-term success of all public health programs and it should be a priority for state CLPPPs because they must be able to continue providing much-needed services and activities in the event of an unexpected decrease or elimination of a single source of funding. This is especially important as available funds for public health have been declining in recent years, eligibility criteria change, and congressional appropriations for federal funding are subject to politics and changing priorities from different administrations. Reliance on a single source of funding that is reduced or eliminated may result in state CLPPPs once again curtailing or suspending lead poisoning prevention activities.

Sustainable funding can be achieved by identifying diverse sources of funding and revenue streams that can adequately cover the cost of primary and secondary lead poisoning prevention activities. Identifying funding from multiple sources optimizes program effectiveness and helps to sustain the delivery of services and activities over time. This toolkit provides an overview of sources of funding and revenue streams that are available to state CLPPPs from the federal government, at the state level, and from nongovernmental sources. It also proposes strategies that emphasize programmatic sustainability through blending and braiding models that have been modified specifically to meet the needs of state CLPPPs.

Because each state CLPPP has their own established procedures and processes for lead poisoning prevention activities and their own funding mechanisms, this toolkit is intended to serve as a resource for state CLPPPs to assist with sustainability planning. State CLPPPs should consider working with their appropriate state agencies and partners to determine eligibility and applicability of the funding sources included in this text.

Essential Childhood Lead Poisoning Prevention Program Activities

Available sources of funding or revenue streams for state CLPPPs are often limited to specific activities. Therefore, an important element of sustainability for a state CLPPP involves identifying multiple sources of funding that collectively cover all activities conducted by a state CLPPP to best protect children in their state. This toolkit focuses on identifying sources of funding and revenue streams for activities that are commonly conducted by state CLPPPs, hereafter referred to as “essential CLPPP activities.”

Essential CLPPP activities were identified through a review of publicly available information from all 50 states, the District of Columbia, and Puerto Rico. Inclusion in this toolkit indicates that an activity is conducted by most state CLPPPs and is consistent with published guidelines from CDC. This toolkit is not an exhaustive list of activities conducted by each state CLPPP, and the level of engagement with these activities may vary for each program.

For the purposes of this toolkit, essential CLPPP activities are broadly defined and organized into four overarching categories based on the nature of the activity. Categories 3 and 4 are further organized into three subcategories depending on allowable costs for the identified sources of funding. All essential CLPPP activities are also summarized in a one-page checklist tool on [page 9](#).

Category 1: Outreach and Education

Lead poisoning prevention outreach and education has been a priority for CDC and other federal lead programs, such as the Environmental Protection Agency (EPA) and Housing and Urban Development (HUD), since the early 1990s. The passage of the Residential Lead-Based Paint Hazard Reduction Act of 1992, otherwise known as Title X, directs the Administrator of EPA, the Secretary of Health and Human Services (HHS), and the Secretary of HUD to conduct outreach and education activities to increase awareness of lead poisoning among the public, healthcare providers, and public health professionals.⁹ This prioritization of outreach and education for CDC, HUD, and EPA has been formally extended to state CLPPPs through federal funding opportunities, publicly available educational materials, and national initiatives, such as National Lead Poisoning Prevention Week.¹⁰

The purpose of outreach and education activities is to increase awareness and knowledge among audiences about a specific topic and promote messaging about lead poisoning prevention. Common messaging includes information about sources of lead, health effects of lead, the importance of blood lead testing, prevention of lead exposure, and services offered by state CLPPPs. Audiences include individuals, people in high-risk areas and other high-risk populations, specific industries, health professionals, and the general public.^{9,11} Examples of common outreach and education activities related to lead poisoning prevention include educational campaigns, community events, mass media campaigns, trainings for professionals and the public, state advisory committees, lead-safe housing registries, and lead poisoning phone hotlines.

Category 2: Surveillance

EBLLs were the first non-infectious condition to be considered notifiable at the national level by the Council of State and Territorial Epidemiologists (CSTE) in 1995.¹² Today, all 50 states require BLLs to be reported to a designated state agency, often the state CLPPP; however, the reporting requirements vary by state. For example, some states may require reporting of all BLLs, while others may only require reporting of EBLLs greater than or equal to 5 µg/dL.

State health departments, and more specifically state CLPPPs, are the primary repository for statewide surveillance and epidemiological activities related to environmental health.¹³ One of the most important data points in lead poisoning surveillance is blood lead testing data. Healthcare providers are the primary entity responsible for conducting venous and capillary blood lead testing. In each state, blood lead test results must be sent to the state CLPPP in a timely manner, according to state regulations, either by the healthcare provider or laboratory that analyzed the blood sample.

Once state CLPPPs receive blood lead test results, they have the responsibility of collecting, managing, analyzing, and reporting information in ways that support their other essential CLPPP activities. Blood lead data can be used by state CLPPPs to identify children with EBLLs, refer those with EBLLs for follow-up activities, monitor trends in EBLLs over time, identify high-risk areas and populations in the state to focus outreach and education activities, and conduct epidemiological analyses.¹²

Local CLPPPs may also provide their own essential activities independent from the state CLPPP, following local regulations. State CLPPPs may also coordinate with local CLPPPs across the state regarding the collection, usage, and dissemination of blood lead data.¹⁴ As the entity that manages the data, state CLPPPs may work with local CLPPPs to ensure they have access to blood lead data from their jurisdiction for EBLL case management and to conduct their own epidemiological analyses at the sub-county or census tract level. Additionally, state CLPPPs may be able to provide technical assistance and epidemiological support to local CLPPPs that are completing applications for funding.

Category 3: Follow-up to Elevated Blood Lead Levels

CDC has adopted a blood lead reference value (BLRV) of 3.5 µg/dL that is used to identify children with BLLs that are higher than most children's levels. This value is based on the 97.5th percentile of blood lead distribution in children between the ages of 1 and 5 years from the National Health and Nutrition Examination Survey (NHANES).¹⁵ States are not required to adopt CDC's 3.5 µg/dL reference value as their state's action level and may instead opt for a higher BLRV based on available resources, funding restrictions, and state policies. Following the identification of a child with an EBLL, state CLPPPs are often involved in the coordination, provision, and oversight of services that reduce a child's BLL below the state's action level.

State CLPPPs offer several follow-up activities and services to families of children with EBLLs, regardless of their state's action level. These activities and services are further detailed in the three subcategories below. These categories are consistent with CDC's "Summary of Recommendations for Follow-up and Case Management Based on Confirmed Blood Lead Levels."¹⁶

Consideration was given to available sources of funding that may cover some, but not all, of the included activities.

3.1: Case Management

Case management is focused on reducing a child's exposure to lead and decreasing their BLL below the state's action level. These activities include providing education to parents and families, recommending a follow-up blood lead testing schedule, conducting interviews to determine possible sources of lead exposure, identifying at-risk behaviors, monitoring BLLs over time, making referrals to services (see 3.3 *Linkages to Services*), and the general coordination of care for children with EBLLs.

3.2 Environmental Investigations

For the purposes of this publication, environmental investigations are any sampling of residential properties with the purpose of identifying the source(s) of lead and lead hazards in the environment of a child with an EBLL. This may include sampling of lead-based paint, dust, soil, water, and consumer products.¹⁷⁻¹⁹ Environmental investigations may be completed in conjunction with case management (see *3.1: Case Management*) or independently. Additionally, this toolkit considers environmental investigations as independent from the abatement of any identified lead hazards (see *Category 4: Abatement of Lead Hazards*), as funding sources may cover the identification of lead hazards and not abatement activities.

3.3: Linkages to Services

As even low BLLs are associated with IQ deficits, learning problems, and developmental delays, children with EBLLs require prompt and appropriate support to mitigate the long-term effects of lead exposure.¹⁹ State CLPPPs may establish a system of referral for families of children with EBLLs to take advantage of available state services and resources. Common referrals include developmental assessments, early intervention services, and nutritional counseling.

Category 4: Abatement of Lead Hazards

Lead abatement activities are designed to permanently eliminate identified lead hazards in a child's environment.²⁰ This includes the abatement of lead paint, dust, and soil hazards that are determined to contribute to a child's lead exposure. Abatement activities require work to be completed by professionals trained in lead abatement and certified to conduct renovation, repair, and painting projects, either by the EPA or by the state licensing agency. All abatement work should be completed using lead-safe work practices and following state regulations.²¹ Abatement activities can be completed as primary prevention, to prevent children from being poisoned, or as secondary prevention, to remove a lead hazard that already poisoned a child. Depending on state or local regulations, property owners may be ordered to conduct abatement activities after a child residing at their property is identified with an EBLL or abatement activities may be completed voluntarily by property owners.²⁰

Additional details about various abatement activities are included in the three subcategories below. Available funding may be specific to the type of lead hazard or the location of the lead hazard. It's important to note that many sources that fund the abatement of lead hazards also fund the identification of lead hazards.

4.1: Lead-Based Paint Hazard Control

Lead-based paint (LBP) may be present on residential properties and dwellings built before 1978, which is the year that LBP was banned from such properties. When LBP starts to deteriorate, it can create lead paint chips and dust hazards. Children may be exposed to lead by chewing on surfaces with LBP, eating lead paint chips, or ingesting or inhaling lead dust. Several million houses in the United States in which young children reside have LBP hazards.²² LBP hazards are most commonly identified through a lead risk assessment with x-ray fluorescence (XRF) testing and dust sampling. Abatement for LBP hazards usually include replacing housing components (e.g. windows, doors, stairs, etc.) or removing a hazard from a child's environment altogether. This toolkit focuses on residential LBP hazards.

4.2: Community-based Environmental Contamination

Community-based environmental contamination includes non-paint lead hazards that may be found on residential properties but did not stem from a residential exposure, as well as hazards that may be prevalent through a specified geographic area. These sources may include lead in soil, water, and air. Soil in residential yards or in community playgrounds may be contaminated with lead due to previous use of leaded gasoline in cars, from industrial sources, or from occupational activities that are or were once conducted in the area.¹⁷ Similarly, the air quality in some communities may be contaminated with lead through ore and metals processing facilities, manufacturing, and piston-engine aircraft that operate on leaded aviation fuel.²³ In addition, children can be exposed to lead from drinking water because of the corrosion of lead service line (LSL) and plumbing fixtures. Controlling the levels of lead in drinking water is usually the responsibility of the public water system, which must follow the EPA's Lead and Copper Rule and implement corrosion control treatment methods.¹⁷

4.3: Lead-Safe Childcare Facilities and Schools

A child may also be exposed to lead hazards in any place that they regularly visit or spend time, including childcare facilities and schools that may not be as strictly regulated by state or local lead policies. The most common sources of lead associated with childcare facilities and schools include LBP, particularly in home-based childcare facilities, and lead in water, products, and equipment.²⁴

Tool: Essential CLPPP Activities Checklist

Purpose: This checklist provides a one-page overview of all essential CLPPP activities. State CLPPPs can use this checklist to identify the essential activities they conduct in their state. It can also be used to identify activities that state CLPPPs don't conduct but are interested in providing or activities they would like to strengthen. Descriptions of each activity are included on [pages 5 to 8](#). This checklist also includes blank spaces for state CLPPPs to add any activities they conduct that are not included in this toolkit and an open space to make any notes.

Essential CLPPP Activities:

- Outreach and Education

- Surveillance

- Follow-up to Elevated Blood Lead Levels
 - Case Management
 - Environmental Investigations
 - Linkages to Services

- Abatement of Lead Hazards
 - Lead-Based Paint Hazard Control
 - Community-based Environmental Contamination
 - Lead-Safe Childcare Facilities and Schools

Other:

- _____
- _____
- _____
- _____
- _____

Notes:

Sources of Funding and Revenue for Childhood Lead Poisoning Prevention Programs

This section identifies sources of funding and common revenue streams for state CLPPPs that provide funding for essential CLPPP activities. These funding sources are included because they (1) are specific to lead poisoning prevention, (2) are an existing revenue stream in which lead poisoning prevention could be prioritized, or (3) could be leveraged in a way that enhances the sustainability of essential CLPPP activities in the event of a sudden or unexpected decrease in funds. Table 1 on [page 50](#) links each funding source directly to the essential CLPPP activities it has the potential to fund.

An overview of each funding source is provided with general guidance on applying each funding source to sustaining lead poisoning prevention efforts as well as resources for additional information. There may be some sources of funding or revenue that are not available to some state CLPPPs due to state regulations or resource constraints. State CLPPPs should conduct their own research about funding eligibility and the implementation of each funding source in coordination with internal and external partners. The funding sources included in this section are available to state CLPPPs at the time of publication, and there is no guarantee that these sources of funding will be available in the future.

Federal Sources of Funding and Revenue

Centers for Disease Control and Prevention (CDC)/Agency for Toxic Substances and Disease Registry (ATSDR)

Childhood Lead Poisoning Prevention Cooperative Agreement

This cooperative agreement from CDC's CLPPP supports state and local efforts to meet four strategies:

1. Strengthen blood lead testing
2. Strengthen surveillance
3. Strengthen population-based interventions
4. Strengthen processes to identify lead exposed children and linkage to services

Cooperative agreement recipients have flexibility in how they allocate funding if the activities support these four strategies. Examples of activities conducted by recipients include the following:

- Developing a statewide blood lead testing plan
- Conducting analysis of surveillance data
- Submitting data to CDC on a quarterly basis
- Maintaining and enhancing surveillance systems
- Analyzing blood lead data to identify high-risk areas and populations
- Conducting trainings for public health professionals and key stakeholders
- Developing a system of referrals for children with EBLLs
- Creating a mass media outreach campaign
- Educating the public and stakeholders about lead poisoning
- Connecting lead-exposed children to services

- Paying the salaries of personnel conducting follow-up case management activities for children with EBLLs
- Establishing a statewide lead poisoning prevention advisory committee²⁵

Additional Resources

CDC. *Funding Information.* Links to the Childhood Lead Poisoning Prevention Program’s most current Notice of Funding Opportunity (NOFO) announcements.

<https://www.cdc.gov/nceh/lead/programs/funding.htm>

CDC. *Success Stories.* Success stories from state and local CLPPP cooperative agreement recipients.

<https://www.cdc.gov/nceh/lead/programs/success-stories.htm>

CDC. *State and Local Programs.* Links to the homepages of all state CLPPPs and funded recipients.

<https://www.cdc.gov/nceh/lead/programs/default.htm>

Enhancing Innovation and Capabilities of the Environmental Public Health Tracking Network

CDC’s National Environmental Public Health Tracking program funds state and local health departments through a cooperative agreement to conduct environmental health surveillance to guide public health actions that reduce or prevent the impact of environmental hazards, including lead. Public health actions informed by surveillance data include identifying populations at risk, responding to outbreaks and emerging threats, identifying and preventing hazards, and informing stakeholders (e.g. policymakers, community members, etc.) about potential environmental health risks.²⁶

These funds have previously been used by state health departments to

- Identify geographic areas with high rates of EBLLs and old housing stocks in order to target interventions for lead poisoning prevention,²⁷
- Educate landlords in high-risk geographic areas about lead and conduct lead dust sampling in their rental units,²⁸
- Establish a reporting mechanism for adult BLLs,²⁹ and
- Connect EBLL rates with elevated concentrations of lead in soil, resulting in an emergency clean-up of the area.³⁰

Additional Resources

CDC. *State & Local Tracking Programs.* Links to current state tracking program profiles and information about the most recent NOFOs. <https://www.cdc.gov/nceh/tracking/grants.htm>

CDC. *Tracking Success Stories.* Success stories from state and local tracking partners, including success stories about lead poisoning prevention and videos about tracking in action.

<https://www.cdc.gov/nceh/tracking/successstories.htm>

Public Health Associate Program

CDC’s Public Health Associate Program (PHAP) is a two-year training program for recent graduates, in which associates are assigned to public health agencies across the United States to gain hands-on public

health experience. The salaries and benefits of PHAP associates are paid for by the CDC and host sites are responsible for developing work activities and providing opportunities for associates to gain entry-level experience in a specific program area. Previous PHAP associates have been assigned to state and local health departments to work on environmental health and lead poisoning prevention efforts, such as EBLL case management, environmental investigations, and outreach and education related to lead poisoning prevention.³¹

Additional Resources

CDC. *Public Health Professionals Gateway: Public Health Associate Program.* Overview of PHAP with links for more information. <https://www.cdc.gov/phap/index.html>

CDC. *Become a Host Site.* Information for potential host sites about eligibility, the application process, and testimonials from previous host sites, and answers to frequently asked questions. https://www.cdc.gov/phap/become_hostsite/opportunity.html

CDC. *Benefits for Host Site.* Factsheet about hosting a PHAP associate. <https://www.cdc.gov/phap/docs/PHAP-Host-Site-Benefits-508.pdf>

CDC. *PHAP Fact Sheet.* Factsheet about PHAP for associates. https://www.cdc.gov/phap/become_associate/opportunity.html

ATSDR's Partnership to Promote Local Efforts to Reduce Environmental Exposure

ATSDR's Partnership to Promote Local Efforts to Reduce Environmental Exposure (APPLETREE) cooperative agreement provides state health departments with resources to identify and decrease or eliminate hazardous substances and to establish programs that assist with preventing exposure to hazardous substances, including lead. All recipients receive funding to conduct site-specific public health assessments and community engagement. Funding may also be used to participate in ATSDR's Choose Safe Places for Early Care and Education (CSPECE) program, which evaluates the environmental safety of childcare facilities. Recipients may also apply for additional funding that focuses specifically on building state and local capacity to respond to environmental hazards, including lead.³²

After an environmental hazard is identified through a public health assessment, such as lead in water or soil, recipients are required to educate community members, stakeholders, and health professionals about the exposure and any risk to health. Recipients should also consider conducting soil Screening, Health, Outreach, and Partnership (soilSHOP) events, in which community members can have their soil screened for lead and receive education about lead hazards, safe gardening practices, and methods for protecting children against lead.³³ State CLPPPs may partner with APPLETREE-funded programs to ensure soilSHOP events are prioritized in localities where lead in soil may be a concern. SoilSHOP events are also an opportunity for state CLPPPs to provide outreach, educate their constituents, and promote the services they offer to the community. Additionally, state CLPPPs can work with APPLETREE recipients to prioritize the identification of lead hazards in childcare facilities through the CSPECE program, address any lead hazards identified in communities, and conduct outreach and education to communities with lead hazards.³⁴

Additional Resources

ATSDR. *State Cooperative Agreement Program: Background.* General information about the APPLETREE cooperative agreement. <https://www.atsdr.cdc.gov/states/background.html>

ATSDR. *APPLETREE Funding Announcements for FY 2020–2023.* Information about current APPLETREE funding opportunities and the 28 state health departments that are currently funded. https://www.atsdr.cdc.gov/states/appletree_funding_announcement.html

ATSDR. *Choose Safe Places for Early Care and Education (CSPECE) Guidance Manual.* Publication about the purpose and implementation of CSPECE, including information about lead poisoning in early care and education. https://www.atsdr.cdc.gov/safeplacesforECE/docs/Choose_Safe_Places_508_final.pdf

ATSDR. *soilSHOP Toolkit.* Toolkit to assist with planning soilSHOP events. <https://www.atsdr.cdc.gov/soilshop/index.html>

U.S. Department of Housing and Urban Development (HUD)

Lead-Based Paint Hazard Reduction Grant Program

The purpose of the Lead-Based Paint Hazard Reduction Grant Program (LHR) grant program is to protect children under the age of six from lead poisoning through the identification and control of LBP hazards in privately-owned rental and owner-occupied residential properties. State, county, city, township, special district, and Native American tribal governments are eligible to apply; however, state governments may only apply if they have an EPA authorized LBP training and certification program. Eligible states may also apply with other eligible entities with one entity serving as the principal applicant responsible for implementing the grant.

Beneficiaries of the LHR grant program must reside in or own a pre-1978 property and meet the eligibility income requirements based on the area median income level. At least 65% of grant funding must be spent on LBP hazard control remediation activities in residential properties in which children under the age of six reside or visit regularly, and all identified lead hazards must be controlled or eliminated either through interim controls or abatement. Other direct costs, such as the following, are not part of the 65% minimum requirement:

- Targeted outreach activities on lead poisoning prevention and lead hazard control
- Training property owners on the EPA Renovation, Repair, and Painting (RRP) Rule
- Developing a registry of lead-safe units
- Conducting blood lead testing on persons residing in enrolled units
- Collecting, analyzing, and evaluating data related to grant activities
- Evaluating the effectiveness of lead hazard control activities conducted under the grant program
- Participating in technical studies regarding lead hazard control activities
- Purchase of up to two XRF machines to be used exclusively by the grant program

The maximum funding amount a recipient can receive from the LHR grant program is divided into four categories of eligibility based on the recipient's previous grant funding and abatement needs as determined by HUD. State applicants may also be eligible for Healthy Homes Supplemental funding to identify and remediate housing-related health and safety hazards. Each recipient must also commit a

minimum 10% match of their federal request, excluding the amount awarded for the Healthy Homes Supplement. Community Development Block Grant (CDBG) funds may be used as a match if they are designated for activities and costs allowed under this grant program.

This grant program may be implemented by state CLPPPs or by housing departments in state and local governments. If implemented by a housing department, state CLPPPs should partner with the housing department to implement their LHR grant program. Examples of partnership activities may include linking eligible families with EBLs to the grant program, setting up referral systems for blood lead testing, providing education about lead poisoning prevention to property owners and tenants enrolled in the grant program, and advertising enrollment in this grant program through outreach and education in high-risk geographic areas and populations.³⁵

Additional Resources

HUD. Lead Hazard Reduction Grant Program. Overview of the Lead-Based Paint Hazard Reduction Grant Program and link to the most recent Program Notice of Funding Availability.

https://www.hud.gov/program_offices/spm/gmomgmt/grantsinfo/fundingopps/fy20_lhr

HUD. OLHCHH Project Descriptions. Descriptions of LHR grantee programs by state, as of September 30, 2019. https://www.hud.gov/sites/dfiles/Main/documents/Lead_HH_Grants.pdf

HUD. Start-up Resources for New OHHLHC Grant Programs. Guidance and resources for new grant programs. https://www.hud.gov/program_offices/healthy_homes/lbp/startup

HUD. OLHCHH Grantee Contact List. State and local LHR grant program recipients, as of April 10, 2019. https://www.hud.gov/sites/dfiles/HH/documents/HUD_OLHCHH_Lead_Hazard_Control_Grantees.pdf

HUD. Purpose and Use of Healthy Homes Supplemental Funding (HHSupp). Description of healthy homes supplemental funding. <https://www.hud.gov/sites/documents/2016HHSUPPPOLICY.PDF>

EPA. Lead Abatement, Inspection and Risk Assessment. States with EPA authorized lead-based paint training and certification programs. <https://www.epa.gov/lead/lead-abatement-inspection-and-risk-assessment>

Green & Healthy Homes Initiative. Lead Funding Toolkit. Toolkit with strategies for the implementation of LHR grant program funds for lead poisoning prevention, starting on page 5.

https://www.greenandhealthyhomes.org/wp-content/uploads/Lead-Funding-and-Financing-Toolkit-5-29-19_final.pdf

Lead and Healthy Homes Technical Studies Program

This program focuses on improving knowledge about housing-related health and safety hazards through the development of new hazard assessment and control methods with two sources of funding: Lead Technical Studies (LTS) and Healthy Homes Technical Studies (HHTS). This toolkit focuses on LTS because it is specific to lead poisoning prevention, but state CLPPPs may also be eligible for HHTS.

The purpose of the LTS program is to improve the efficacy and cost-effectiveness of LBP hazard control and evaluation. HUD encourages applicants to propose activities that are based on previously completed HUD-sponsored work and other published research. HUD is also particularly interested in applications that propose a partnership with a HUD-funded LHR Grant Program, evaluate the effectiveness of lead hazard control intervention, study soil treatments to reduce lead bioavailability, or analyze existing data related to the identification and control of lead-based paint hazards.

State CLPPPs have flexibility in the activities and studies they propose for funding; however, HUD recommends that applicants consider these items:

- Alignment in addressing priority health and safety hazards
- Expected efficacy and cost-effectiveness
- Ability to generate definitive results
- Implementation of activities and study
- Impact in improving understanding of lead hazards
- Likelihood of reducing racial and ethnic health disparities³⁶

Additional Resources

HUD. *The Lead Technical Studies Grant Program.* Overview of the LTS program with links to previously funded abstract from FY2006–FY2017. https://www.hud.gov/program_offices/healthy_homes/lbp/lts

HUD. *Fiscal Year 2020 Lead and Healthy Homes Technical Studies Program.* Information about the most recently funded LTS and HHTS programs and link to the FY20 Program Notice of Funding Opportunity.

https://www.hud.gov/program_offices/spm/gmomgmt/grantsinfo/fundingopps/FY20_LHHTS_NOFO_FR-6400-N-15.pdf

Community Development Block Grant Program

States, cities, and counties may receive funding from the Community Development Block Grant (CDBG) Program on an annual basis through a formula allocation. Funding is provided to develop communities, provide decent housing opportunities, and expand economic opportunities for low- to moderate-income persons. There are nine CDBG programs that serve different populations and geographic areas. This toolkit focuses on the State CDBG Program that is most applicable to the delivery of essential state CLPPP activities. State CLPPPs may also be able to apply funding from the other eight CDBG programs to cover essential CLPPP activities.

Under the State CDBG Program, state governments receive an annual allocation of CDBG funds to award to local governments in non-entitlement areas, defined as cities with population less than 50,000 and counties with populations less than 200,000. Every year, each state is responsible for developing funding priorities and deciding on which activities to fund for local governments to carry out in their jurisdictions. States set their priorities through an Annual Action Plan and a five-year Consolidated Plan.³⁷

Activities funded under the State CDBG Program that may be applicable to essential CLPPP activities include relocation and demolition of properties, rehabilitation of residential and non-residential

structures, and public services. Additionally, CDBG funding may be used to fund LSL replacement programs to reduce lead in drinking water. Regardless of which activities are conducted, at least 70% of CDBG funds must be used for activities that benefit low- to moderate-income persons.³⁸

The State CDBG Program is flexible in how it is carried out, so state CLPPPs may work with their state agency responsible for CDBG funding to prioritize lead poisoning prevention and essential CLPPP activities. Under the State CDBG Program, states and local government may use CDBG funds to rehabilitate existing units, conduct lead-based paint inspections and abate identified hazards, and meet the minimum match requirement for HUD Lead-Based Paint Hazard Reduction Grants.³⁹ Additionally, when CDBG funds are used on any housing built before 1978, the Lead Safe Housing Rule must be enforced.⁴⁰

Additional Resources

HUD. *Community Development*. Links to information about all nine CDBG programs and resources for funded programs. https://www.hud.gov/program_offices/comm_planning/communitydevelopment

HUD Exchange. *State Community Development Block Grant Program*. Online portal for information about the State CDBG Program. <https://www.hudexchange.info/programs/cdbg-state/>

HUD Exchange. *Basically CDBG for States*. Training about implementing the State CDBG Program. Chapters 1, 2, 4, and 13 are relevant to use funding for lead poisoning prevention. <https://www.hudexchange.info/resource/269/basically-cdbg-for-states/>

HUD Exchange. *Explore CDBG*. Technical assistance products for CDBG projects and grantees in all nine CDBG programs. <https://www.hudexchange.info/programs/cdbg/cdbg-ta-products/#all-products>

HUD Exchange. *Consolidated Plan*. Information about Consolidated Plans and Annual Action Plans. <https://www.hudexchange.info/programs/consolidated-plan/>

HUD Exchange. *Community Development Block Grant HUD Administered Non-Entitled Counties in Hawaii Program*. Information about the HUD-administered CDBG program in Hawaii. <https://www.hudexchange.info/programs/cdbg-hud-administered/>

EPA. *Strategies to Achieve Full Lead Service Line Replacement*. Description of using CDBG funding for an LSL replacement program, on page 27. https://www.epa.gov/sites/production/files/2019-10/documents/strategies_to_achieve_full_lead_service_line_replacement_10_09_19.pdf

Green & Healthy Homes Initiative. *Lead Funding Toolkit*. Toolkit with strategies for the implementation of CDBG funds for lead poisoning prevention, starting on page 12. https://www.greenandhealthyhomes.org/wp-content/uploads/Lead-Funding-and-Financing-Toolkit-5-29-19_final.pdf

Lead-Based Paint Capital Fund Program

Under the Lead-Based Paint Capital Fund Program (LBPCF), HUD provides funding to Public Housing Authorities (PHAs) to identify and eliminate lead-based paint hazards in public housing. Funding may be used to conduct lead-based paint risk assessments, inspections, abatement, interim controls, clearance examinations, and relocation of tenants in public housing units. State CLPPPs can work with PHAs that receive this funding to ensure that all children under the age of six residing in affected public housing receive blood lead tests and that PHAs provide educational materials to residents. Additionally, state CLPPPs may coordinate with PHAs or other local organizations to prioritize placing eligible families with children under the age of six or children with EBLLs in public housing units where LBP hazards have been eliminated, or to have PHAs target lead-based paint hazard activities on units with children under the age of six.⁴¹

Additional Resources

HUD. Office of Capital Improvements. Links to the most recent Notice of Funding Availability, FAQs, and summary of previously funded grantees.

https://www.hud.gov/program_offices/public_indian_housing/programs/ph/capfund

HUD. Lead-Based Paint Capital Fund Notice of Funding Availability Frequently Asked Questions. FAQ about the application and eligible activities.

https://www.hud.gov/sites/dfiles/PIH/documents/LBPCF_10202020.pdf

Housing Choice Voucher Program

The purpose of the Housing Choice Voucher Program (HCV) is to assist very-low-income families with renting or purchasing privately-owned rental housing that is considered safe, decent, and affordable. This program is administered by Public Housing Authorities (PHAs), which receive funding directly from HUD. Families that qualify for HCV are responsible for identifying an eligible housing unit with a property owner that agrees to participate in the program. The PHA then pays a housing subsidy directly to the owner, and the family is responsible for paying the remainder of the rent. If authorized by the PHA, families may also use the subsidy to purchase a qualifying home. PHAs have the responsibility of determining eligibility for participating families. At least 75% of participating families that receive a voucher must have an annual gross income that does not exceed 30% of the area median income based on the size of the family, as defined by HUD. Once a family is determined to be eligible for HCV, they are usually placed on a waiting list to receive a voucher due to limited resources and high demand.

All housing units occupied by participating families must meet HUD's housing quality standards (HQS) for being considered lead-safe prior to occupancy by a participating family. State CLPPPs may partner with PHAs in their state to ensure these standards are met and that abatement activities are taking place in a safe and timely manner in the event that a child has an EBLL. Additionally, PHAs have the authority to establish local preferences for selecting participating families from their waiting lists that meet housing needs in their jurisdictions. State CLPPPs can also partner with PHAs to update waiting list preferences to prioritize families with children that have EBLLs or families with children under the age of six in order to ensure they are placed in lead-safe housing in a timely manner.⁴²

Additional Resources

HUD. *Housing Choice Vouchers Fact Sheet.* Overview of the Housing Choice Voucher Program. https://www.hud.gov/program_offices/public_indian_housing/programs/hcv/about/fact_sheet

HUD. *About the Housing Choice Voucher Program.* Links to resources about HCV implementation. https://www.hud.gov/program_offices/public_indian_housing/programs/hcv/about

Electronic Code of Federal Regulations. *Section 8 Tenant-Based Assistance: Housing Choice Voucher Program.* Statutory language for all HCV regulations, including regulations about lead-based paint (§982.401) and determining local preferences for waiting lists (§982.207). https://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title24/24cfr982_main_02.tpl

Green & Healthy Homes Initiative. *Lead Funding Toolkit.* Toolkit with strategies for leveraging HCV funds for lead poisoning prevention, starting on page 11. https://www.greenandhealthyhomes.org/wp-content/uploads/Lead-Funding-and-Financing-Toolkit-5-29-19_final.pdf

Home Investment Partnership Program

Under the Home Investment Partnership Program (HOME), state governments receive funding through a federal block grant that is specifically dedicated to creating affordable housing for very low- and low-income households. Funding amounts for each state are determined each year by a formula. State governments are either awarded this allocation or \$3 million, whichever is greater. States that receive HOME funding must provide a 25% match and at least 15% of HOME funding must be set aside for Community Housing Development Organizations (CHDO), which are private, nonprofit, community organizations that focus on developing affordable housing for the community.^{43,44}

Funding from the HOME Program may be used for building, buying, and rehabilitating affordable housing for rent or homeownership. All housing units that receive HOME funding must be made lead-safe, and HOME funds can be used for lead hazard control interventions in housing units with identified lead hazards. State governments must develop and submit a Consolidated Plan with Annual Action Plans that describes the states' priorities, short-term goals, and long-term goals. State CLPPPs may collaborate with the state agency responsible for developing the Consolidated Plan and Annual Action Plans to incorporate lead hazard control interventions and any other eligible activities focused on providing lead-safe housing into each plan.

Additional Resources

HUD. *Home Investment Partnerships Program.* Summary of the HOME Program with links to HOME-specific resources, policy guidance, and HOME topics. https://www.hud.gov/program_offices/comm_planning/home

HUD. *HOME Investment Partnerships Program FAQs.* FAQs about the HOME Program, organized by topic. https://www.hud.gov/program_offices/comm_planning/home/faqs

HUD Exchange. *HOME CHDO.* Overview of CHDOs and their role in the implementation of the HOME Program. <https://www.hudexchange.info/programs/home/topics/chdo/#policy-guidance-and-faqs>

HUD Exchange. HOME Cross-Cutting Requirements. Federal rules that apply to the administration of the HOME Program. <https://www.hudexchange.info/programs/home/topics/cross-cutting-requirements/#policy-guidance-and-fags>

HUD Exchange. Consolidated Plan. Information about Consolidated Plans and Annual Action Plans. <https://www.hudexchange.info/programs/consolidated-plan/>

Green & Healthy Homes Initiative. Lead Funding Toolkit. Toolkit strategies for the implementation of HOME Program funds for lead poisoning prevention, starting on page 14. https://www.greenandhealthyhomes.org/wp-content/uploads/Lead-Funding-and-Financing-Toolkit-5-29-19_final.pdf

[Authority to Accept Unsolicited Proposals for Research Partnerships](#)

In fiscal year 2019, HUD's Office of Policy Development and Research announced their authority to accept unsolicited research proposals that address HUD's current research priorities and promote HUD's Strategic Plan 2018–2022 and Research Roadmap. Research proposals can be submitted at any time within the dates outlined in the Notice of Funding Opportunity, and funding is awarded as proposals are received and are evaluated based on need and the availability of funds. Each application must outline cost sharing for at least 50% of the total project costs from philanthropic organizations or federal, state, or local government agencies.

State CLPPPs may submit a proposal under this funding opportunity that focuses on an innovative research project that has the potential to inform HUD policies and programs, including ones focused on lead poisoning prevention. There is flexibility in the activities that can be conducted with this funding if the proposal is innovative, unique, and clearly demonstrates how the proposed work can benefit HUD's research and development responsibilities, among other requirements.

Suggested examples of research proposals about lead poisoning prevention that are applicable to essential CLPPP activities include

- Control of lead exposures from residential water, industrial source, or housing products,
- Low-cost, effective methods to increase blood lead screening and testing of children living in public housing in high-risk areas,
- Barriers to increase blood lead screening and testing of children living in public housing in high-risk areas, and
- Development of a model for factors (e.g. geographic area, socioeconomic status) that are correlated with elevated blood lead levels in children.⁴⁵

Additional Resources

HUD. Authority to Accept Unsolicited Proposals for Research Partnerships Notice. Most recent Notice of Funding Opportunity released in fiscal year 2019. <https://www.hud.gov/sites/dfiles/SPM/documents/RevisedUnsolicitedProposalforResearchUSP.pdf>

HUD. Office of Policy Development and Research: Research Partnerships. Links to information about this program, FAQs, previously funded projects and reports, research priorities, and required information for research proposals. <https://www.huduser.gov/portal/rp/home.html>

HUD. HUD Research Roadmap: 2017 Update. Report on HUD’s priority research opportunities, including projects related to lead poisoning included on page 36.

<https://www.huduser.gov/portal/pdf/ResearchRoadmap-2017Update.pdf>

HUD. Strategic Plan 2018–2022. Report on HUD’s priority research opportunities, including the removal of lead-based paint hazards from homes on page 19.

<https://www.hud.gov/sites/dfiles/SPM/documents/RevisedUnsolicitedProposalforResearchUSP.pdf>

Additional Resources for All HUD Programs

HUD. Funding Opportunities. All available discretionary funding and previous funding announcements from HUD over the past four years.

https://www.hud.gov/program_offices/spm/gmomgmt/grantsinfo/fundingopps

HUD Exchange. Which Lead Rules Apply to My Program or Project? Identifies which HUD programs must abide by which subparts of the Lead Safe Housing Rule.

<https://www.hudexchange.info/programs/lead-based-paint/>

U.S. Environmental Protection Agency (EPA)

Superfund Program

The Superfund Program was authorized by Congress in 1980 through the passage of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).⁴⁶ The purpose of this program is to clean up land contaminated with environmental toxins, including lead, and to respond to environmental emergencies. The Superfund Program has four goals:

- Protect human health and the environment by cleaning up contaminated sites.
- Make responsible parties pay for cleanup work.
- Involve communities in the Superfund process.
- Return Superfund sites to productive use.⁴⁷

Once a contaminated site is identified, EPA conducts a historical review to determine possible sources of contamination. If a party can be held responsible for the contamination, they may be accountable for the cleanup work or for reimbursement of cleanup efforts. If no party can be held responsible, cleanup efforts and necessary funding is administered through EPA. Once a site is included on the National Priority List (NPL), treatment options are evaluated, and cleanup plans are developed and carried out. After cleanup activities have been completed, the site is regularly monitored to ensure that cleanup efforts are effective. Only once cleanup goals have been achieved and are determined to be fully protective of human health, the site is removed from the NPL; however, it typically takes years, and sometimes decades, to achieve this.⁴⁸

Community involvement and participation is an integral part of the Superfund cleanup process. After a site is included on the NPL, EPA is required to conduct community interviews and develop a Community Involvement Plan that specifies how a community is involved throughout the cleanup process.⁴⁹ Additionally, communities may establish a Community Advisory Group to represent community interests

and partake in meetings with EPA, state agencies, and other stakeholders. EPA also offers the Superfund Technical Assistance Grant (TAG) Program for communities to pay for one or more technical advisors that to help interpret and explain technical reports, site conditions, and EPA's proposed cleanup proposals and decisions.⁵⁰

Lead-contaminated Superfund sites are often a result of historic smelting, mining, or manufacturing operations. When lead is a confirmed contaminant, BLLs of local residents are be tested before and after cleanup efforts to confirm that environmental exposures have been reduced. Activities that are conducted during cleanup efforts for lead Superfund sites vary depending on the source of contamination, but may include soil testing and remediation, risk assessments and abatement of exterior lead-based paint hazards on residential properties, outreach and education campaigns, and blood lead testing events.⁵¹

State governments are involved in almost every step of the Superfund cleanup process, from site identification to removal from the NPL. Even if they are not the designated state agency, state CLPPPs may also be involved through the cleanup process by collaborating with the designated state entities to leverage the community-specific infrastructure set up with funding to properly address a Superfund site. State CLPPPs can provide technical assistance to communities and local agencies heading cleanup efforts, conduct outreach and education activities in affected communities, support blood lead testing of residents at Superfund sites, and assist with cleanup efforts.

Additional Resources

EPA. *Superfund Home*. Homepage for the EPA Superfund Program with links to additional information. <https://www.epa.gov/superfund>

EPA. *A Community Guide to EPA's Superfund Program*. Overview of the Superfund process and ways in which communities can get involved. <https://semspub.epa.gov/work/HQ/175197.pdf>

EPA. *Lead at Superfund Sites*. Information about Superfund sites with lead contamination. <https://www.epa.gov/superfund/lead-superfund-sites>

EPA. *Superfund Cleanup Process*. Details about each step of the Superfund cleanup process. <https://www.epa.gov/superfund/superfund-cleanup-process>

EPA. *Superfund Success Stories*. Success stories of Superfund sites across the United States for all environmental contaminants, including lead sites. <https://www.epa.gov/superfund/superfund-success-stories>

EPA. *Superfund Community Advisory Groups*. Overview of Community Advisory Groups. <https://www.epa.gov/superfund/community-advisory-group-cag-resources>

EPA. *Technical Assistance Grant (TAG) Program*. Overview of the TAG Program. <https://www.epa.gov/superfund/technical-assistance-grant-tag-program>

Green & Healthy Homes Initiative. Lead Funding Toolkit. Toolkit with strategies for the implementation of Superfund funding to address community-based environmental contamination and lead poisoning prevention, starting on page 20. https://www.greenandhealthyhomes.org/wp-content/uploads/Lead-Funding-and-Financing-Toolkit-5-29-19_final.pdf

Brownfields Program

A brownfield is defined by the EPA as “a property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.”⁵² The goal of the Brownfields Program is to safely cleanup environmental contaminants from brownfields and redevelop the area to support community revitalization goals.⁵³ The four stages of the brownfield process are planning, assessment, cleanup, and redevelopment. The Brownfields Program currently has seven grant programs that fund environmental assessments, cleanup, and job training opportunities for brownfield sites. State governments are eligible to apply for all seven grant programs based on need. Grant programs that are most applicable to essential CLPPP activities are the Brownfields Assessment Grants, Brownfields Revolving Loan Fund Grants, Brownfields Cleanup Grant, and State and Tribal Response Program Grants. However, state CLPPPs may also apply for the other grant programs to cover essential CLPPP activities.

Lead is the most reported contaminant cleaned up from brownfield sites. Most lead exposures stem from previous mining operations, remnants of lead from fuel, paint, inks, piping, batteries, and ammunition.⁵⁴ Even if they are not a designated state agency to clean up a brownfield site, state CLPPPs may also be involved through the cleanup process by collaborating with the designated state entities to leverage the community-specific infrastructure set up with funding from the Brownfields Program. Additionally, brownfields projects must leverage partnerships at the state and local level, including state CLPPPs.

Funding for brownfield sites is often used in conjunction with other sources of federal funding from grant programs that are carried out by state CLPPPs, such as HUD’s LHR Grant Program or CDBG funds. Therefore, state CLPPPs may also use this funding to be involved with or provide technical assistance during environmental assessments, plan development for cleanup and revitalization, and cleanup activities, including lead abatement and outreach and education activities.

Additional Resources

EPA. Overview of EPA’s Brownfields Program. Overview of the Brownfields Program with links to information about the seven grant programs. <https://www.epa.gov/brownfields/overview-epas-brownfields-program>

EPA. EPA’s Brownfields and Land Revitalization Program. Summary of the Brownfields Program and the seven grant programs. https://www.epa.gov/sites/production/files/2020-04/documents/brownfield_brochure_updates_v07_web_release_508.pdf

EPA. 2019 Brownfields Federal Programs Guide. Information about other sources of federal funding that can be leveraged to support activities being completed with funding from the Brownfields Program. https://www.epa.gov/sites/production/files/2019-09/documents/2019_federal_programs_guide.pdf

EPA. *Past Property Uses May Result in a Brownfield Site.* Overview of sites that may qualify as a brownfield and information about common contaminants, including lead.

https://www.epa.gov/sites/production/files/2019-10/documents/past_property_uses_may_result_in_a_brownfield_site.pdf

EPA. *Assessing Brownfield Sites.* Overview of the site assessment process for brownfields.

https://www.epa.gov/sites/production/files/2020-07/documents/assessing_brownfield_sites.pdf

EPA. *Cleaning Up Brownfield Sites.* Overview of the cleanup process for brownfields.

https://www.epa.gov/sites/production/files/2019-10/documents/cleaning_up_brownfield_sites.pdf

EPA. *Reuse Possibilities for Brownfield Sites.* Overview of brownfield redevelopment options.

https://www.epa.gov/sites/production/files/2019-10/documents/reuse_possibilities_for_brownfield_sites.pdf

The Water Infrastructure Improvements for the Nation Act Grants

The Water Infrastructure Improvements for the Nation (WIIN) Act was passed in 2016 with the goal of improving the drinking water infrastructure in the United States. It established three separate drinking water grants, all of which can benefit state CLPPPs:

- Assistance for Small and Disadvantaged Communities Grant
- Reduction in Lead Exposure via Drinking Water Grant
- Lead Testing in School and Child Care Program Drinking Water Grant

State CLPPPs may become involved with all three grant programs in some capacity, but are more likely to be most directly involved in implementing the Assistance for Small and Disadvantaged Communities Grant and the Lead Testing in School and Child Care Program Drinking Water Grant programs because they target funding to state governments.⁵⁵

The Assistance for Small and Disadvantaged Communities Grant awards funding to state governments to help public water systems in underserved, small, and disadvantaged communities meet the requirements of the Safe Drinking Water Act (SDWA), conduct household water quality testing, and respond to contaminants in drinking water. State governments have some flexibility in choosing which eligible activities to fund in small and disadvantaged communities. These are defined as communities with a population less than 10,000 individuals that also lack the ability to incur debt to sufficiently comply with SDWA requirements. Once these communities are identified, state CLPPPs may coordinate with the state government agency implementing this grant to determine methods of collaboration that support essential CLPPP activities.

Examples of these activities include

- Targeting small and disadvantaged communities that are in high-risk areas,
- Prioritizing water testing at households with EBLLs of children under the age of six, and
- Conducting outreach and education about lead in drinking water in small and disadvantaged communities or at individual households that may be targeted for LSL replacements.

There is a cost match requirement of 45% of total funds for this grant, which can be covered with in-kind contributions, such as expertise, salaries, and HUD CDBG funds.⁵⁶

The Reduction in Lead Exposure via Drinking Water Grant program directly funds disadvantaged communities and schools to remove sources of lead in drinking water and replace LSLs. State government agencies are also eligible to apply with a cost match requirement of 20%. Funding from this grant program should be used to address two National Priority Areas: (1) drinking water infrastructure and treatment improvements and (2) reductions in lead in drinking water at schools and childcare facilities. State CLPPPs may coordinate with the agencies implementing this grant to determine methods of collaboration that support essential CLPPP activities, such as conducting outreach and education to inform community members about lead reduction projects and the hazards of lead in drinking water, prioritizing households with EBLs or children under the age of six for lead service line replacements, assisting with the establishment and maintenance of an LSL inventory, identifying childcare facilities in high-risk areas that may benefit from this program, and assisting with water testing in schools and childcare facilities.⁵⁷

The Lead Testing in School and Child Care Program Drinking Water Grant program is available to state government agencies for the voluntarily testing of drinking water in schools and childcare facilities that are in low-income and disadvantaged communities. Funding from this grant program should be used to support activities that are consistent with the EPA's *3Ts for Reducing Lead in Drinking Water in Schools* guidance or any applicable state regulations.⁵⁸ State CLPPPs may be involved in the implementation of this grant in several ways, including conducting drinking water testing and conducting outreach and education to community members about drinking water test results.⁵⁹

Additional Resources

EPA. *The Water Infrastructure Improvements for the Nation Act (WIIN Act) Grant Programs.*

Information about the WIIN Act with links to information about the three grant programs.

<https://www.epa.gov/dwcapacity/water-infrastructure-improvements-nation-act-wiin-act-grant-programs>

EPA. *WIIN Grant: Assistance for Small and Disadvantaged Communities Drinking Water Grant.*

Overview and FAQs about the Assistance for Small and Disadvantaged Communities Grant.

<https://www.epa.gov/dwcapacity/wiin-grant-assistance-small-and-disadvantaged-communities-drinking-water-grant#faqs>

EPA. *Assistance for Small and Disadvantaged Communities Drinking Water Grant Program Grant Implementation Document.*

Information about implementing the Assistance for Small and Disadvantaged Communities Grant. https://www.epa.gov/sites/production/files/2019-08/documents/assistance_for_small_and_disadvantaged_communities_grant_implementation_document_08_27_19.pdf

EPA. *WIIN Grant: Reduction in Lead Exposure Via Drinking Water.*

Information about the Reduction in Lead Exposure via Drinking Water Grant and a link to the most recent Request for Applications.

<https://www.epa.gov/dwcapacity/wiin-grant-reduction-lead-exposure-drinking-water>

EPA. Basic WIIN 2107 Factsheet – Lead Testing in Schools and Childcare Facilities. Factsheet about the Lead Testing in Schools and Childcare Facilities grant program.

https://www.epa.gov/sites/production/files/2019-04/documents/wiin_2107_factsheet_april_2019.pdf

EPA. WIIN Grant: Lead Testing in School and Child Care Program Drinking Water. Information about implementing the Lead Testing in School and Child Care Program Drinking Water Grant.

<https://www.epa.gov/dwcapacity/wiin-grant-lead-testing-school-and-child-care-program-drinking-water>

EPA. 3Ts for Reducing Lead in Drinking Water in Schools and Child Care Facilities: A Training, Testing, and Taking Action Approach. Resource for schools and childcare facilities interested in implementing a voluntary program to reduce the level of lead in their drinking water.

<https://nepis.epa.gov/Exe/ZyPDF.cgi/P100VLI2.PDF?Dockkey=P100VLI2.PDF>

Drinking Water State Revolving Fund

The Drinking Water State Revolving Fund (DWSRF) was established through the Safe Drinking Water Act (SDWA) in 1996 to assist states and water systems with achieving the health protection objectives of the act. State governments receive DWSRF funding from congressional appropriations based on the results of the most recent Drinking Water Infrastructure Needs Survey and Assessment, along with a 20% match from each state. State governments can opt to allocate up to 31% of their total funding as set-aside funds for specific programs and activities to ensure safe drinking water. The remaining funds and state match are placed in a revolving loan fund that is dedicated to infrastructure improvement projects. State governments manage this bank of funding by providing zero- or low-interest loans to water systems for water infrastructure projects that focus on the treatment, transmission and distribution, source, storage, consolidation, and creation of new systems.

State governments are required to submit an annual Intended Use Plan (IUP) to receive funding from the DWSRF. Since IUPs must receive public comment prior to submission and are regularly updated, this provides an opportunity for state CLPPPs to meet with the state government agency implementing this funding to prioritize strategies and activities that advance essential CLPPP activities. For example, state governments have the authority to rank project applications from water systems and develop a Project Priority List for determining which projects to fund. State CLPPPs may coordinate with the state government agency implementing the DWSRF to prioritize projects that support essential CLPPP activities, such as LSL replacements or lead testing in schools that are on a public water system. Both set-aside funding and funding from the revolving loans can be used for these projects.⁶⁰

Additional Resources

EPA. Drinking Water State Revolving Fund (DWSRF). Information about the DWSRF program with links to resources for implementation and technical assistance. <https://www.epa.gov/dwsrf>

EPA. Drinking Water State Revolving Fund Eligibility Handbook. Overview of activities and eligible projects, including LSL replacements. https://www.epa.gov/sites/production/files/2019-10/documents/dwsrf_eligibility_handbook_june_13_2017_updated_508_versioni.pdf

EPA. DWSRF 2019 Annual Report. Report on how DWSRF funding was spent in 2019 and future priorities. https://www.epa.gov/sites/production/files/2020-10/documents/2019_annual_report_final_508compliant.pdf

EPA. DWSRF Infographic. Factsheet on the benefits of the DWSRF. https://www.epa.gov/sites/production/files/2019-11/documents/dwsrf_infographic-final_nov_2019.pdf

EPA. Use of Drinking Water State Revolving Fund (DWSRF) Set-Asides. Overview of how state drinking water programs use the DWSRF set-aside funding. <https://www.epa.gov/dwcapacity/use-drinking-water-state-revolving-fund-dwsrf-set-asides>

Water Infrastructure Finance and Innovation Act Program

The Water Infrastructure Finance and Innovation Act (WIFIA) program provides long-term and low-interest supplemental loans to governmental and non-governmental agencies for water infrastructure projects. Loans from the WIFIA program may be used to supplement funding for projects that are also funded by DWSRF loans, as well as projects that reduce lead and other contaminants from drinking water. Funding from the WIFIA program can supplement up to 49% of total project costs. State government agencies are more likely to use WIFIA loans for large projects, such as rehabilitation or construction projects, because the minimum borrowing amount is \$20 million for communities with a population size over 25,000.

Eligible borrowers for a WIFIA loan include local, state, and tribal government entities and DWSRF-funded projects. All borrowers must submit an IUP, which details the project(s) being funded with the loan, and all applications for WIFIA loans must describe the extent to which the project(s) reduce exposure to lead in drinking water. State CLPPPs may partner with state agencies that receive WIFIA loans to prioritize strategies and activities that advance essential CLPPP activities in the IUP. Additionally, state CLPPPs may provide technical assistance on projects funded by WIFIA loans that focus on reducing lead from drinking water, such as conducting outreach and education activities in impacted areas.⁶¹

State governments may also apply for the State Infrastructure Financing Authority WIFIA (SWIFIA) program, which is only available to state borrowers for eligible drinking water projects. This program may also fund projects that receive funding from the DWSRF program. This program is similar to the WIFIA program in that the minimum borrowing amount is \$20 million, and SWIFIA loans can be used to supplement up to 49% of project costs. However, SWIFIA loans are only available to fund projects that are ready to proceed within 18 months. State CLPPPs may also partner with state government agencies that receive a SWIFIA loan in similar ways as they would WIFIA loans.⁶²

Additional Resources

EPA. Water Infrastructure Finance and Innovation Act. Information about the WIFIA programs with links to resources for current and potential WIFIA loan borrowers. <https://www.epa.gov/wifia>

EPA. WIFIA Program Handbook. Information about how the WIFIA program is administered by the EPA. https://www.epa.gov/sites/production/files/2021-05/documents/program_handbook_fy_2021.pdf

EPA. 2019 Annual Report. Report on current and closed WIFIA loans and an overview of WIFIA loan implementation. https://www.epa.gov/sites/production/files/2020-02/documents/wifia_2019_annual_report.pdf

EPA. What is SWIFIA? Overview of the SWIFIA program with links to the most recent Notice of Funding Availability. <https://www.epa.gov/wifia/what-swifia>

State Environmental Justice Cooperative Agreements Program

The purpose of the State Environmental Justice Cooperative Agreements Program (SEJCA) is to provide funding to government agencies and government-created organizations to improve environmental health and public health outcomes in communities that are disproportionately affected by environmental risks. Activities funded by the SEJCA program should be designed to be replicated in other communities with similar challenges and should support the integration of environmental justice into state government programs. The most recent funding cycle has also given special consideration to projects that focus on the impact of the COVID-19 pandemic on underserved communities and vulnerable populations.

There is flexibility in how SEJCA funding is allocated, as long as funded activities support the relevant federal environmental statutes highlighted in the Request for Applications. State CLPPs may apply for SEJCA funding directly or may support other state and local government agencies that apply. The activities related to lead poisoning prevention that may be funded in communities with environmental justice concerns or vulnerable populations include the following:

- Outreach and education programs that bring public awareness to reducing childhood lead exposures
- Examination of blood lead data to identify best practices for conducting outreach and education activities
- Research on areas of policy development for lead poisoning prevention or on the health effects of lead exposure
- Development of tools or training programs that can assess the source of lead exposure in a timely manner
- Assessment of the impact of COVID-19 on lead exposure and blood lead levels⁶³

Additional Resources

EPA. State Environmental Justice Cooperative Agreements (SEJCA). Information about the SEJCA program with links to previously funded projects and the most current Request for Applications. <https://www.epa.gov/environmentaljustice/state-environmental-justice-cooperative-agreement-program>

EPA. SEJCA/COVID-19 Project Summaries 2020. Summaries of funded projects from the most recent funding cycle, including several projects focused on lead poisoning prevention. https://www.epa.gov/sites/production/files/2020-10/documents/sejca_project_summaries_2020.pdf

Environmental Justice Collaborative Problem-Solving Cooperative Agreement Program

The Environmental Justice Collaborative Problem-Solving (EJCPS) Cooperative Agreement Program provides funding to address local environmental health and public health issues, such as lead poisoning, in underserved communities through collaborative problem-solving and the development and implementation of community-driven solutions. Collaborative problem-solving brings together resources from at least three committed partners to address an identified issue. Projects that received EJCPS funding must follow the program's model, and applicants must be directly connected to the underserved community in which the project is taking place.

State government agencies are not eligible to apply for EJCPS funding; however, they are encouraged to establish a formal partnership with eligible community-based organizations (CBOs) in their state. There is flexibility in how EJCPS funding is allocated, as long as funded activities support the relevant federal environmental statutes highlighted in the Request for Applications. Previously funded CBO-CLPPP projects include providing outreach and education to community members and key stakeholders about lead hazards, conducting water testing, remediating community-based lead hazards, developing lead-safe housing registries, and testing children's blood lead levels.⁶⁴

Additional Resources

EPA. *The Environmental Justice Collaborative Problem-Solving Cooperative Agreement Program.*

Information about the EJCPS program with links to the most recent Request for Applications, resources for implementation, and previously funded projects. <https://www.epa.gov/environmental-justice/environmental-justice-collaborative-problem-solving-cooperative-agreement-0>

EPA. *2020 EJCPS Project Summaries.* Report with descriptions of projects funded under the most recent Request for Applications, including CBO-CLPPP projects focused on lead poisoning prevention.

https://www.epa.gov/sites/production/files/2020-10/documents/ejcps_roject_summaries_2020.pdf

EPA. *Factsheet on EJCPS Cooperative Agreement Program.* Factsheet about the EJCPS program and the Collaborative Problem-Solving Model. <https://www.epa.gov/sites/production/files/2016-06/documents/cps-fact-sheet-111913.pdf>

Environmental Justice Small Grants Program

The goal of the Environmental Justice Small Grants (EJSG) Program is to support and fund the initial steps of projects that aim to understand and address local environmental and public health issues in underserved communities. This funding also should be used to build local capacity to be able to address environmental and public health issues over time through partnerships with local, state, federal, industry, and academic stakeholders. Funding for this program is available for CBOs. The application process is structured to be more easily accessible for organizations that may be unfamiliar with the federal grants process.

There is flexibility in how EJSG funding is allocated, as long as funded activities support the relevant federal environmental statutes highlighted in the Request for Applications, including addressing lead contamination in underserved communities. State government agencies are not eligible to directly apply for EJSG funding; however, they are encouraged to establish a formal partnership with eligible community-based organizations in their state.⁶⁵

Previously funded projects have addressed lead poisoning concerns through targeted outreach and education to landlords and housing inspectors about lead-based paint, identification of high-risk geographic areas through geographic information system (GIS) mapping, outreach and education about lead in drinking water, testing for lead in soil, and conducting outreach about lead-safe gardening.⁶⁶ State CLPPPs may assist local community-based organizations with developing an EJSG work plan and partner with community-based organizations to carry out EJSG work plan activities.

Additional Resources

EPA. *Environmental Justice Small Grants Program.* Information about the EJSG program with links to the most recent Request for Applications, resources for implementation, and previously funded projects. <https://www.epa.gov/environmentaljustice/environmental-justice-small-grants-program>

EPA. *Emerging Tools for Local Problem Solving.* Links to three documents that highlight success stories and tools that were developed as a result of funding from the EJSG program during 1994–2005. <https://www.epa.gov/environmentaljustice/emerging-tools-local-problem-solving>

EPA. *Environmental Justice Small Grants Program Grant Tutorial.* Presentation that provides an orientation to the EJSG program application process. https://www.epa.gov/sites/production/files/2018-11/documents/ej_small_grants_tutorial.pdf

U.S. Department of Health and Human Services (HHS) – Other

Head Start

Over 1,600 Head Start agencies in all 50 states, the District of Columbia, and six territories receive funding to provide services within their local communities. These agencies include nonprofit and for-profit organizations, tribal governments, and school systems that are responsible for supporting a child's growth through developmental services, early learning and school readiness, health screenings, referrals to medical and dental services, mental health consultations and referrals, and family support services. Enrollment in Head Start is available at no cost for children under the age of five from low-income families, families and children that are homeless, and children in the foster care system. The national Office of Head Start also administers the Early Head Start program for infants and toddlers under the age of three and pregnant women; the American Indian and Alaska Native (AIAN) Head Start program for children of AIAN heritage; and the Migrant and Seasonal Head Start program for children with parents working in agricultural labor.⁶⁷

Head Start programs are required to coordinate with parents of enrolled children to ensure that each child receives a blood lead screening. This requirement meets the Early and Periodic Screening, Diagnostic and Treatment (EPSDT) lead screening requirements set by the Centers for Medicare and Medicaid Services (CMS). During this process, Head Start programs must also provide health education services that include informing parents about the lead exposure and blood lead testing, and provide relevant outreach and educational materials.⁶⁸

The Office of Head Start highlights six strategies for Head Start programs to meet the lead screening requirement:

1. Partner with local primary care providers to receive blood lead tests for all enrolled children.
2. Collaborate with Health Services Advisory Committees to conduct outreach to local primary care providers, local health departments, and Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) offices about blood lead screening.
3. Develop a relationship with the local American Academy of Pediatrics (AAP) and Head Start State Collaboration Office to conduct outreach to primary care providers and other community organizations that can conduct blood lead testing.
4. Leverage federal resources from CDC, EPA, and HUD on blood lead screening.
5. Provide an explanation in the annual Program Information Report (PIR) on why not all children received a blood lead screening.
6. Purchase blood lead screening equipment to conduct screenings onsite, as a last resort.⁶⁹

State CLPPPs may leverage these efforts and existing mechanisms in several ways. Head Start programs are required to establish selection and admission criteria annually that is based on community needs, family income, homeless or foster care status of the child, age, and whether a child is eligible for special education or early intervention services.⁷⁰ State CLPPPs that conduct case management activities may work with Head Start programs in their state to prioritize enrollment or waiting list status for children with an EBLI, particularly low-income children. If children with an EBLI are unable to be prioritized for Head Start enrollment, state CLPPPs may instead establish a system of referral for EBLI children to join the waiting list. State CLPPPs may also work in partnership with Head Start programs to conduct outreach to local primary care providers about blood lead screening and to parents of enrolled children about lead exposure. State CLPPPs may provide epidemiological support for Head Start programs to target outreach efforts to specific primary care providers or high-risk geographic areas. Additionally, state CLPPPs may use funding from federal grant programs, such as the EPA's Lead Testing in School and Child Care Program Drinking Water Grant under the WIIN Act, to test for lead in drinking water at Head Start programs. State CLPPPs may also meet with Head Start programs, Health Services Advisory Committees, and the Head Start State Collaboration Office in their state to determine opportunities for partnerships that could support essential CLPPP activities.

Additional Resources

Office of Head Start. *Head Start Services.* Information about services offered at Head Start programs.

<https://www.acf.hhs.gov/ohs/head-start-services>

Head Start, Early Childhood Learning & Knowledge Center. *Strategies for Meeting the Lead Screening Requirement in Head Start.* Further detail on the six strategies for Head Start programs to meet lead screening requirements. <https://eclkc.ohs.acf.hhs.gov/physical-health/article/strategies-meeting-lead-screening-requirement-head-start>

Head Start, Early Childhood Learning & Knowledge Center. *Head Start Performance Standards.* Links to the statutory language that informs performance standards for Head Start programs, including requirements related to lead poisoning. <https://eclkc.ohs.acf.hhs.gov/policy/45-cfr-chap-xiii>

USDA. *Enhancing Participant-Centered Services Between the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) and Head Start Programs.* Strategies at the state and local level to improve coordination between WIC and Head Start programs.

https://wicworks.fns.usda.gov/sites/default/files/media/document/10_Ways_WIC_and_Head_Start_Can_Collaborate.pdf

EPA. *WIIN Grant: Lead Testing in School and Child Care Program Drinking Water.* Information about implementing the Lead Testing in School and Child Care Program Drinking Water Grant, which can be used to conduct lead water testing in Head Start programs. <https://www.epa.gov/dwcapacity/wiin-grant-lead-testing-school-and-child-care-program-drinking-water>

Title V Maternal and Child Health Services Block Grant Program

The Title V Maternal and Child Health Services (MCH) Block Grant Program is one of the largest federal block grant programs in the United States, funding all 50 states and nine jurisdictions to provide health care and public health services for pregnant women, infants, and children.⁷¹ There are two other funding programs under the MCH Block Grant Program—Special Projects of Regional and National Significance (SPRANS) and Community Integrated Service Systems (CISS); however, this toolkit focuses the MCH Block Grants as it is most applicable to the delivery of state CLPPP essential activities.

At least 30% of MCH Block Grant must be allocated to assist children with special healthcare needs and another 30% or more must be allocated for preventive and primary care services for children. Additionally, 40% of funding must be allocated for other qualifying maternal and child health activities.⁷² However, there is flexibility in how states and jurisdictions allocate their MCH Block Grant funding within these requirements to deliver the four types of funded services:

1. Direct healthcare services (e.g. health services for children and youth with special healthcare needs)
2. Enabling services (e.g. transportation, outreach, case management, coordination with Medicaid, WIC, and education)
3. Population-based services (e.g. lead screening, nutrition screening, immunization, injury prevention)
4. Infrastructure building services (e.g. needs assessment, evaluation, policy development)

Funding amounts are determined through a formula allocation based on the proportion of low-income children that live in each state. State maternal and child health agencies must apply for MCH Block Grant funding every year through the submission of an Annual Report, in which they also report on the expenditure of funds and performance measures from the previous year. In addition, every five years, each state must submit a statewide needs assessment, or State Action Plan, which is used for strategic planning, decision making, and to determine benchmark performance measures over a five-year period. In their State Action Plan, states must identify their priority needs by designating National Outcomes Measures (NOMs), National Performance Measures (NPMs), and Evidence-based Strategy Measures (ESMs). Each of these measures are tied to a national data source to allow for timely and accurate data reporting. States may also choose to identify State Performance Measures (SPMs), which are priority needs that haven't been addressed through the state's NPMs.⁷¹ In addition, states must perform an independent audit every two years.

There are five sources of MCH funding generally create a federal-state partnership for implementing the block grant:

1. Federal allocation – funding from the federal government
2. Local MCH funds – funding from local jurisdictions
3. Other funds – funding from coordination with related programs, such as CDC, Healthy Start, and WIC
4. Program income – funding collected by the state maternal and child health agency from payments for services, insurance payments, and Medicaid reimbursements
5. State MCH funds – funding from each state’s match requirement, which is \$3 to every \$4 received from their federal allocation.⁷²

State CLPPPs may leverage MCH Block Grant funding in several ways but may be most successful in increasing blood lead testing, satisfying the requirement for providing population-based services. State CLPPPs may submit a petition or collaborate with the state maternal and child health agency to select lead poisoning prevention as a priority area and performance measure in the state’s five-year State Action Plan. This ensures that funding is available to meet specific performance measures, such as increasing blood lead testing rates. State CLPPPs may also provide blood lead data for inclusion in the state’s needs assessment to ensure that lead poisoning prevention is prioritized in the five-year State Action Plan. Additionally, state CLPPPs may be involved in establishing a system of referrals to connect EBL children and their families with services also provided by MCH Block Grant funding, such as developmental assessments, early intervention services, or EBL case management. State CLPPPs may also work with their maternal and child health agency to conduct outreach and education to healthcare providers in Title V clinics about blood lead testing. State CLPPPs may identify their maternal and child health agency responsible for implementing the state’s MCH Block Grant, which often resides within the state health department, to determine how to best leverage this funding.

Additional Resources

Health Resources & Services Administration. *Title V Maternal and Child Health Services Block Grant Program.* Overview of the MCH Block Grant Program. <https://mchb.hrsa.gov/maternal-child-health-initiatives/title-v-maternal-and-child-health-services-block-grant-program>

Health Resources & Services Administration. *Title V Information System (TVIS).* Database that provides public access to state applications and annual reports, information about performance measures, and resources on implementing the MCH Block Grant program. <https://mchb.tvisdata.hrsa.gov/>

Health Resources & Services Administration. *Guidance and Forms for the Title V Application/Annual Report.* Instructions on completing the required Application/Annual Report and Reporting Forms. <https://mchb.tvisdata.hrsa.gov/uploadedfiles/TvisWebReports/Documents/blockgrantguidance.pdf>

Health Resources & Services Administration. *Guidance and Forms for the Title V Application/Annual Report, Appendix of Supporting Documents.* Supplement to the above document with information about the MCH Block Grant program and technical assistance resources. <https://mchb.tvisdata.hrsa.gov/uploadedfiles/Documents/blockgrantguidanceappendix.pdf>

Congressional Research Service. *Maternal and Child Health Services Block Grant: Background and Funding.* Report prepared for members and committees of Congress about implementation of the MCH Block Grant program. <https://fas.org/sgp/crs/misc/R44929.pdf>

Missouri Department of Health and Senior Services. *Maternal and Child Health Services Title V Block Grant FY 2020 Application/FY 2018 Annual Report.* Report from Missouri with an overview of how Missouri's state CLPPP leveraged MCH Block Grant funding for lead poisoning prevention activities. <https://health.mo.gov/living/families/mch-block-grant/pdf/title-v-application-annual-report.pdf>

State of Michigan Department of Health and Human Services. *Maternal and Child Health Services Title V Block Grant FY 2020 Application/FY 2018 Annual Report.* Report from Michigan with an overview of how Michigan's state CLPPP leveraged MCH Block Grant funding for lead poisoning prevention activities. https://www.michigan.gov/documents/mdhhs/MI_Title_V_FY20_FOR_PUBLIC_POSTING_X_655540_7.pdf

Healthy Start

The Healthy Start program targets communities with high infant mortality rates to reduce negative birth outcomes; improve the health of mothers and their children before, during, and after pregnancy; and reduce racial and ethnic differences in perinatal outcomes. The Healthy Start program provides healthcare services, enabling services, public health services, and trainings to healthcare providers to achieve these goals. Funding is available to state, territorial, and local health departments, CBOs, and educational and medical institutions.⁷³

The Healthy Start program has four strategic approaches to achieving their goals: improve women's health, improve family health and wellness, promote systems change, and assure impact and effectiveness. There are 19 benchmark measures that outline activities to achieve those approaches. This toolkit highlights the "Well Child Visits" benchmark, as it most closely aligns with the essential CLPPP activities; however, other benchmarks may also be related or applicable for state CLPPPs. Under the "Well Child Visits" benchmark, programs should aim to "Increase proportion of Healthy Start child participants who receive the last age-appropriate recommended well child visit based on AAP schedule to 90%," which includes age-appropriate preventive services, such as blood lead screenings and developmental assessments.^{74,75} State CLPPPs may identify the Healthy Start programs in their states to ensure that the Well Child Visits benchmark is being prioritized and may also conduct outreach and education to Healthy Start staff to ensure blood lead testing is being included in preventive pediatric healthcare visits.

Additional Resources

Health Resources & Services Administration. *Healthy Start.* Information about the Healthy Start program, including an overview of program goals, strategic approaches, and services provided with funding. <https://mchb.hrsa.gov/maternal-child-health-initiatives/healthy-start>

Healthy Start EPIC Center. *Healthy Start EPIC Center.* Database that provides public access to implementation strategies and technical assistance documents. <https://www.healthystartepic.org/>

Healthy Start EPIC Center. Approach. Summary of the 19 benchmarks, including Well Child Visits. <https://www.healthystartepic.org/healthy-start-implementation/healthy-start-approaches/>

Healthy Start EPIC Center. Healthy Start Performance Measure: Well Child Visits. Document that outlines strategies for meeting the Well Child Visit benchmark measure with a link to the AAP's Recommendations for Preventive Pediatric Health Care. https://www.healthystartepic.org/wp-content/uploads/2018/03/well_child508.pdf

United States Department of Agriculture (USDA)

Supplemental Nutrition Assistance Program and SNAP Education

The Supplemental Nutrition Assistance Program (SNAP) provides nutritional assistance to eligible low-income families through a monthly allotment of benefits to be used for purchasing nutritious foods. State government agencies are responsible for the administration of SNAP in each state, often through local offices.⁷⁶ As part of the SNAP, state government agencies may also provide nutrition education and obesity prevention programs for program recipients through SNAP Education (SNAP-Ed). SNAP-Ed is an evidence-based program that teaches SNAP-eligible participants about nutrition, physical activity, and how to make healthy choices on a tight budget. Additionally, communities may conduct outreach and education, hold training classes, and focus on policy, systems, and environmental change (PSE) interventions.⁷⁷

While state CLPPPs are not able to receive SNAP or SNAP-Ed funding directly, there are opportunities to leverage these funds by collaborating with SNAP and SNAP-Ed partners to discuss implementing and prioritizing lead poisoning prevention in their state program. This includes providing education programs to SNAP-participating families in areas that are high-risk for lead poisoning. Education classes can focus on nutrition and how to incorporate key nutrients into a healthy diet, even on a limited budget. State CLPPPs may also use the existing SNAP and SNAP-Ed education and outreach framework to distribute lead exposure information, such as getting a blood lead test or identifying lead hazards in the home.

State CLPPPs may establish a referral system to connect eligible families and participants with SNAP benefits and SNAP-Ed activities. Families of EBLL children may be prioritized for referrals for SNAP enrollment or registration for education classes. State CLPPPs may also partner with state government agencies to develop interventions that change PSEs to increase access to food rich in the key nutrients that limit lead exposure.

Additional Resources

USDA. Supplemental Nutrition Assistance Program (SNAP). Homepage for SNAP. <https://www.fns.usda.gov/snap/supplemental-nutrition-assistance-program>

USDA. Supplemental Nutrition Assistance Program Education (SNAP-Ed). Homepage for SNAP-Ed. <https://www.fns.usda.gov/snap/SNAP-Ed>

USDA. SNAP-Ed Plan Guidance and Templates. Links to policy guidance documents for states about operating SNAP-Ed. <https://snaped.fns.usda.gov/program-administration/guidance-and-templates>

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USDA. Federal Nutrition Programs: Reducing the Impact of Lead Exposure. Tips for how state and local government agencies can implement federal nutrition programs to limit lead exposure through nutrition. <https://www.fns.usda.gov/federal-nutrition-programs-reducing-impact-lead-exposure>

USDA. Promoting Balanced Diets Featuring Key Nutrients. Overview of how to maximize benefits of SNAP and SNAP-Ed for individuals who have been exposed to lead. <https://fns-prod.azureedge.net/sites/default/files/disaster/Balanced-Diets-Key-Nutrients.pdf>

USDA. Policy, Systems, and Environmental Change. Information on the implementation of PSE interventions. <https://snaped.fns.usda.gov/snap-ed-works/policy-systems-and-environmental-change>

Special Supplemental Nutrition Program for Women, Infants, and Children

The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) program serves low-income women, infants, and children up to the age of five that are nutritionally at risk, a designation which includes nutritionally related medical conditions such as lead poisoning. WIC provides participants with supplemental nutritious foods, nutrition counseling and education, health screenings, and referrals to other health-related services. A total of 90 WIC agencies serve all state health departments, the District of Columbia, 34 tribal organizations, and 5 territories. These agencies deliver WIC services through more than 10,000 clinic sites including local health departments, hospitals, community centers, schools, and Indian Health Service facilities. There are also over 47,000 authorized retailers that accept WIC vouchers across the United States.⁷⁸⁻⁸⁰

Children that receive WIC benefits are more likely to have an EBL than children not enrolled in WIC.⁸¹ WIC funding is not generally used to perform venous blood lead testing, but it may be used for these activities:

- Conduct a questionnaire about blood lead testing and exposure histories
- Provide referrals to other clinics or medical offices for blood lead testing
- Perform capillary blood lead testing
- Provide nutrition education and counseling to participants; may include information about incorporating key nutrients into diets that limit lead exposure and absorption
- Provide education about lead poisoning prevention to participants during enrollment, including information about common lead hazards and the health effects of lead
- Provide water filters, ready-to-feed formula, and bottled water to participants impacted by lead in drinking water
- Perform a hematological test to check for iron deficiency anemia, which is a requirement for enrollment and can be associated with EBLs. This blood test at a WIC clinics presents an opportunity to provide education about blood lead tests⁸²⁻⁸⁴

State CLPPPs may collaborate with their state WIC program or clinics in high-risk areas to ensure that lead poisoning prevention is prioritized in their delivery of services. This includes emphasizing key nutrients to reduce lead exposure in nutrition education and counseling sessions and including foods high in these nutrients in WIC packages, as well as ensuring that all WIC healthcare providers are delivering the childhood lead risk questionnaires, conducting lead exposure histories, and providing referrals for blood lead tests when needed. State CLPPPs may also leverage the existing WIC education and outreach framework to distribute educational materials about lead exposure information.

Additional Resources

USDA. Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). Homepage for the WIC program. <https://www.fns.usda.gov/wic>

USDA. WIC Frequently Asked Questions (FAQs). FAQs about the WIC program, enrollment, and services. <https://www.fns.usda.gov/wic/frequently-asked-questions>

USDA WIC Works Resource System. Protect Against Lead Exposure with WIC Foods. Overview of foods available through WIC that are sources of the key nutrients that limit lead exposure. <https://wicworks.fns.usda.gov/resources/protect-against-lead-exposure-wic-foods>

USDA. Promoting Balanced Diets Featuring Key Nutrients. Overview of how to maximize WIC benefits for individuals that have been exposed to lead. <https://fns-prod.azureedge.net/sites/default/files/disaster/Balanced-Diets-Key-Nutrients.pdf>

USDA. Enhancing Participant-Centered Services Between the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) and Head Start Programs. Strategies at the state and local level to improve coordination between WIC and Head Start programs. https://wicworks.fns.usda.gov/sites/default/files/media/document/10_Ways_WIC_and_Head_Start_Can_Collaborate.pdf

State Sources of Funding and Revenue

Note: Availability of these funding and revenue sources may vary by state.

State General Funds

All state governments have a general fund to pay for ongoing expenses. Most state general funds come from revenue generated from state taxes, interest earnings on state-owned assets, and federal aid. State legislatures and governors usually decide how general funds are allocated. Unlike the federal government, most states are required to balance their operating budgets, or general funds, for each fiscal year, which generally means they are not able to use borrowed funds for state expenditures. Most state general funds are spent on education, healthcare, transportation, salaries and benefits for state employees, public welfare, state parks and recreation, aid to local governments, and corrections.⁸⁵

For the purposes of this toolkit, state general funds refer to funding that is appropriated to state CLPPPs through the annual state budget that can be leveraged or allocated to fund essential CLPPP activities. This does not necessarily include fees, penalties and fines, and lawsuits or settlements, which are included and described separately in this toolkit as sources of revenue for state CLPPPs.

State general funds that are allocated to state health departments for public health services and activities tend to be more flexible. Therefore, each state may determine their own funding priorities, including funding for state CLPPPs. However, not all state CLPPPs receive state general funds. State CLPPPs may use state general funds to meet the match payment requirements for federal grants, cover the salaries and benefits for state CLPPP employees that perform essential CLPPP activities, maintain surveillance systems, fund lead abatement activities on residential properties, and more.⁸⁶ Depending

on state regulations and the availability of funds, there is potential to fund most essential CLPPP activities with state general funds or to fund other entities, such as local CLPPPs, to conduct them. State CLPPPs may consult with their state health department or appropriate representatives to determine best methods for using state general funds.

Additional Resources

The Commonwealth of Massachusetts. *Comparative Funding Analysis for the Massachusetts Childhood Lead Poisoning Prevention Program (CLPPP)*. Report from the Commonwealth of Massachusetts with an overview of activities funded by their state general funds.

<https://malegislature.gov/Bills/191/HD4692.pdf>

Center on Budget and Policy Priorities. *Policy Basics: The ABCs of State Budgets*. Factsheet about the appropriations process for state general funds.

<https://www.cbpp.org/sites/default/files/atoms/files/PolicyBasics-StateBudgets.pdf>

NORC at the University of Chicago. *An Examination of Public Health Financing in the United States*.

Report that provides an overview of funding mechanisms implemented by state governments across the United States, including strategies for the implementation of state general funds.

<https://www.norc.org/PDFs/PH%20Financing%20Report%20-%20Final.pdf>

Green & Healthy Homes Initiative. *Lead Funding Toolkit*. Toolkit with strategies for the implementation of state general funds for lead abatement activities, starting on page 24.

https://www.greenandhealthyhomes.org/wp-content/uploads/Lead-Funding-and-Financing-Toolkit-5-29-19_final.pdf

State Lead Service Line Replacement Programs

LSLs are the greatest source of lead in drinking water, contributing up to an estimated 50–75% of the total mass of lead measured from the tap.⁸⁷ Public water systems are often responsible for the regulation and control of lead in drinking water. If lead levels exceed the EPA’s Lead and Copper Rule, public water systems are required to replace their portion of the LSL and must offer to replace any portion owned by customers. However, state governments may also elect to establish a proactive lead service line replacement (LSLR) program, in which LSLs are replaced prior to any exceedance of the Lead and Copper Rule.⁸⁸

In most states, LSLs are owned by the water system up to the curb stop and the rest of the line through the tap is owned by the customer. While water systems may be responsible for maintaining the entire LSL, customers are often responsible for paying for any work performed on their portion of the service line. Furthermore, regulations about LSL ownership and replacement vary by state or municipality. To address lead in drinking water, state governments may allocate funding specifically to establish and maintain a state LSLR program, which can be expanded to include childcare facilities and schools. State LSLR programs should also aim to reduce the number of occurrences when only part of the LSL is replaced (partial LSLR), which is usually the public portion. Evidence suggests that partial LSLRs have not reduced lead levels in drinking water, and in some cases, have increased the level of lead for a period of time after construction.⁸⁸

Like state general funds, funding for LSLR programs are often allocated by state governments through the state's annual budget. However, LSLR programs are designated specifically for addressing lead in drinking water. There is potential to fund outreach and education activities related to lead in water, however, it depends on state regulations and availability of funds. Research shows that this has increased the number of LSLRs initiated and paid for by property owners.⁸⁸

Establishing and operating a state LSLR program differs by state to comply with state and federal regulations. However, state governments have successfully implemented LSLR programs, often completing full LSLRs in a certain percentage of residential properties each year over several years, until all LSLs have been replaced. Strategies for funding state LSLR programs, either through direct funding or legislation that supports water systems, include the following:

- Allocating funding specifically for a state LSLR program through the state annual budget; may provide financial assistance directly to customers to cover some or all the costs of an LSLR or may be distributed to municipalities to cover the cost of LSLRs
- Establishing a low-interest or interest-free loan program for customers, in which the state provides funding to customers directly or to municipalities to create a local loan program
- Increasing the water rates paid by all customers, including those without LSLs, to fund customer owned LSLs
 - May be most effective in states with a smaller proportion of LSLs
 - Strategy often implemented by municipalities but may require state legislation to support or allow for rate increases⁸⁸

State CLPPPs may leverage funding for a state LSLR program through the state or municipal agency that is responsible for carrying out the program. State CLPPPs may be involved in delivering outreach and education about lead in drinking water to customers or areas that are benefitting from or targeted for the state LSLR program. State LSLR programs may also target high-risk communities, based on age of housing stock, number of LSLs, socioeconomic status, or prevalence of EBLLs. State CLPPPs may assist with identifying or selecting these communities. State CLPPPs may also collaborate with the state or local agency implementing a state LSLR program to prioritize families of children with EBLLs as beneficiaries.

Additional Resources

New York State Department of Health. *A Statewide Plan for Lead Service Line Replacement.* Report on the implementation of a New York State's LSLR program, funded by the state through their annual budget. <https://health.ny.gov/environmental/water/drinking/lslr/docs/lslrreportfinal.pdf>

District of Columbia Department of Energy & Environment. *Lead Pipe Replacement.* Overview of the District of Columbia's two LSLR programs. <https://doee.dc.gov/service/leadlinereplacement>

Wisconsin Department of Natural Resources. *Private Lead Service Line Replacement Program.* Overview of Wisconsin's LSLR program, which assists municipalities with funding instead of directly assisting customers or property owners. <https://dnr.wisconsin.gov/aid/documents/EIF/privateLSLreplacementFundingProgram.html>

EPA. *Strategies to Achieve Full Lead Service Line Replacement.* Report on the benefits and challenges of LSLR programs with strategies for establishing LSLR programs and summaries about existing state and local LSLR programs. https://www.epa.gov/sites/production/files/2019-10/documents/strategies_to_achieve_full_lead_service_line_replacement_10_09_19.pdf

EPA. *Lead Service Line Replacement.* Information about federal funding for LSLR, case studies on existing proactive LSLR programs, and links to resources about LSLR programs. <https://www.epa.gov/ground-water-and-drinking-water/lead-service-line-replacement>

Environmental Defense Fund. *State efforts to support LSL replacement.* Overview of state policies that support proactive LSLR programs. <https://www.edf.org/health/state-efforts-support-lsl-replacement>

Lead Service Line Replacement Collaborative. *Home.* Homepage for the LSLR Collaborative with links to legal and policy resources, funding information, plan development, LSLR replacement strategies, and more. <https://www.lslr-collaborative.org/>

Medicaid

Medicaid is a program that is jointly funded by state and federal governments to provide health coverage for low-income people that reside in all states, U.S. territories, and the District of Columbia. Each state is responsible for administering their Medicaid program, following regulations and parameters set by the federal government. Therefore, Medicaid coverage varies by state.

Although Medicaid is considered to be one of the largest expenditures and one of the largest sources of revenue in a state budget, for the purposes of this toolkit, Medicaid is considered a state source of funding.⁸⁹ The federal government contributes about \$6 out of every \$10, with state and local funds covering the remaining amount. States have flexibility in determining the source of their share of Medicaid spending, but the primary source of funding is state general funds, followed by contributions from local governments and revenue generated by taxes and fees.⁹⁰

State Medicaid programs are required by federal law to coordinate with the state Title V MCH Block Grant program. Under this law, Title V MCH programs may assist with coordinating scheduling for EPSDT-eligible services, enrolling eligible children and pregnant women, increasing healthcare provider participation, establishing data sharing between the two programs, conducting quality improvement, and identifying gaps in services.

There are several Medicaid policies and programs that states can use to fund essential CLPPP activities. An overview of the policies and programs that are most applicable to essential CLPPP activities are included below; however, other Medicaid policies and programs may also be applicable. State CLPPPs may be directly involved in carrying out Medicaid policies and programs or may partner with organizations and agencies. State CLPPPs should identify the key Medicaid stakeholders in their state to determine how to best leverage Medicaid funding.

Early Periodic Screening, Diagnosis, and Treatment (EPSDT)

The EPSDT benefit provides health coverage to all Medicaid-enrolled children under the age of 21 and is required in all states. The purpose of this benefit is to ensure that Medicaid enrollees receive

recommended health services and that all health conditions or problems are diagnosed and treated early before becoming more complex and costly. The EPSDT benefit also includes assistance with scheduling and providing transportation services for diagnostic and treatment appointments.

States are responsible for informing children and their families of the available screening services and to arrange for delivery of those services. The screening services covered include blood lead screenings at 12 and 24 months, or between 36 and 72 months if one was not provided prior. In addition, Medicaid-enrolled children are required to receive periodic developmental and behavioral screenings, which could identify any delays in growth or learning caused by exposure to lead.⁹¹⁻⁹³

Children’s Health Insurance Program (CHIP) and Health Services Initiative (HSI)

The CHIP program provides health coverage to uninsured children of families with incomes that are too high for Medicaid enrollment but too low to afford private health insurance. It can be established as an expansion of the state Medicaid program, as a standalone program, or a combination of the two. CHIP programs are also jointly funded by state and federal governments and are administered by states under federal regulation. However, the federal match for CHIP programs varies by state based on an allocation formula. States have the flexibility in designing their own CHIP programs to meet their health needs and priorities, but must also provide certain services, such as well-baby and well-child visits, dental coverage, behavioral health benefits, and vaccines.^{94,95}

Like the EPSDT benefit, all children enrolled in Medicaid-expanded CHIP programs must receive a blood lead screening at required ages. Separate CHIP programs must designate their own blood lead screening schedule, but are encouraged to align it with Medicaid requirements.⁹⁶

States have the option to develop an HSI specific to their state that directly improves the health of low-income children under the age of 19, regardless of Medicaid-enrollment status. States typically elect to focus HSIs on preventive services and interventions. As with CHIP funding, funding for an HSI from both state and federal governments with a higher federal match than CHIP funding. However, total expenditure on HSI activities are capped at a 10% limit of total CHIP funding for the state. Successfully implemented HSIs related to lead poisoning prevention include these activities:

- Increasing awareness about lead exposure
- Increasing access to blood lead screening
- Removing, enclosing, or encapsulating identified lead-based paint and dust hazards
- Removing soil lead hazards
- Removing and replacing lead fixtures, such as LSLs.⁹⁷

Section 1115 Demonstration Waiver

Section 1115 of the Social Security Act, the legislation that authorizes the Medicaid program, provides the HHS Secretary with the authority to approve experimental, pilot, or demonstration projects that promote the objectives of the Medicaid program. States have flexibility in designing a demonstration project under the Section 1115 waivers. Each waiver is evaluated on a case-by-case basis and must be considered budget neutral, meaning that the cost of the demonstration project must not exceed that state’s federal share of Medicaid spending without it. Demonstration projects are typically approved for a five-year project period but may be extended for up to another three to five years.

States may use Section 1115 Demonstration Waivers to meet unique needs or challenges in addressing lead poisoning prevention among their Medicaid-enrolled population. For example, previously approved waivers that focused on lead poisoning prevention funded window replacements in homes of lead poisoned children and expanded Medicaid and CHIP services for residents of Flint, Michigan after exposure to lead in the drinking water.^{98,99}

Additionally, states may implement a Delivery System Reform Incentive Payment (DSRIP) program as part of a Section 1115 Waiver, which offers funding to support hospitals and healthcare providers who care for Medicaid beneficiaries. Under this program, healthcare providers must meet certain performance metrics to access funding, such as lead screening requirements. Typically, the first few years of a DSRIP program focus on infrastructure development and system redesign, both of which may increase the quality of state blood lead data, before focusing on clinical outcome improvements and population-based improvements.¹⁰⁰

Managed Care

Medicaid managed care is a healthcare delivery system that delivers Medicaid health benefits and services through contracts between state Medicaid agencies and managed care organizations (MCOs). Under this delivery system, MCOs receive a capitation, or a payment set per member per month, for providing specific services. The purpose of the Medicaid managed care is to reduce state Medicaid program costs and improve the quality and outcomes of services. Many MCOs provide case management services, including lead poisoned children, which can be reimbursed through Medicaid. About two-thirds of Medicaid beneficiaries receive care through an MCO.

States may also utilize Performance Improvement Projects (PIP) to incentivize MCOs to meet common performance measures (e.g. Healthcare Effectiveness Data and Information Set [HEDIS] measures) related to lead poisoning prevention, including lead screening rates, EBLL case management, environmental lead investigations, and linkages to services. Some states may also penalize MCOs for not meeting measures or provide incentive payments to MCOs that do.¹⁰¹

Additional Resources

Centers for Medicare & Medicaid Services. *Medicaid*. Homepage for the Medicaid program with links to policy and program topics and state Medicaid profiles. <https://www.medicaid.gov/medicaid/index.html>

Centers for Medicare & Medicaid Services. *EPSDT – A Guide for States: Coverage in the Medicaid Benefit for Children and Adolescents*. Guide for states and other stakeholders to understand the scope of services covered under the EPSDT benefit. https://www.medicaid.gov/sites/default/files/2019-12/epsdt_coverage_guide.pdf

Centers for Medicare & Medicaid Services. *Lead Screening*. Information about the lead screening requirement under the EPSDT benefit. <https://www.medicaid.gov/medicaid/benefits/early-and-periodic-screening-diagnostic-and-treatment/lead-screening/index.html>

Centers for Medicare & Medicaid Services. *Children’s Health Insurance Program (CHIP)*. Homepage for the CHIP program with links to additional information about benefits, eligibility, financing, and more. <https://www.medicaid.gov/chip/index.html>

Centers for Medicare & Medicaid Services. *Frequently Asked Questions (FAQs) Health Services Initiatives.* FAQ document that provides an overview of implementing an HSI with questions about addressing lead poisoning prevention through an HSI. <https://www.medicaid.gov/federal-policy-guidance/downloads/faq11217.pdf>

Centers for Medicare & Medicaid Services. *About Section 1115 Demonstration Waivers.* Overview of Section 1115 Demonstration Waivers. <https://www.medicaid.gov/medicaid/section-1115-demonstrations/about-section-1115-demonstrations/index.html>

Centers for Medicare & Medicaid Services. *Managed Care.* Overview of the Medicaid managed care delivery system. <https://www.medicaid.gov/medicaid/managed-care/index.html>

Green & Healthy Homes Initiative. *Lead Funding Toolkit.* Toolkit with strategies for using Medicaid for lead poisoning prevention activities, starting on page 34. https://www.greenandhealthyhomes.org/wp-content/uploads/Lead-Funding-and-Financing-Toolkit-5-29-19_final.pdf

Green & Healthy Homes Initiative. *Potential Medicaid Strategies to Improve Services to Children at Risk of Lead Exposure.* Strategies implemented by states for leveraging Medicaid funding and resources to address lead poisoning prevention, starting on page 33. <https://www.greenandhealthyhomes.org/wp-content/uploads/HMA-GHHI-Potential-Medical-Strategies-to-Improve-Services-to-Children-at-Risk-of-Lead-Exposure.pdf>

National Academy for State Health Policy. *State Strategies to Improve Childhood Lead Screening and Treatment Services under Medicaid and CHIP.* Report about how states may leverage Medicaid and CHIP resources to increase blood lead screening rates. <https://www.nashp.org/wp-content/uploads/2018/04/Childhood-Lead-Screening.pdf>

Yale Journal of Health Policy, Law, and Ethics. *Health Justice Strategies to Eradicate Lead Poisoning: An Urgent Call to Action to Safeguard Future Generations.* Journal article on practice-based evidence for funding and addressing lead poisoning, including Medicaid programs that fund lead poisoning prevention activities, starting on page 187. <https://digitalcommons.law.yale.edu/yjhple/vol19/iss2/4>

Fees and Taxes

State governments may charge a one-time or recurring fee or tax for specific services or products related to lead poisoning prevention. Fees and taxes are commonly imposed on the following services or products related to lead poisoning prevention:

- State-certified construction licenses (e.g. lead-based paint renovation, repair, and painting (RRP), lead-based paint abatement)
- Professional licenses (e.g. property insurance, mortgage brokers or lenders, real estate, small loan agencies)
- Lead certifications (e.g. lead inspector, risk assessor)
- Homeowners' insurance
- Rental registries
- Paint or surface coating materials
- Lead-based products or lead-containing materials (e.g. petroleum)¹⁰²

Fees and taxes may be paid by individuals, businesses, firms, or corporations, and states may include incentives for these entities to be exempt from fees and taxes. Examples of exceptions may include a rental property owner not paying a rental registration fee after providing a certificate that the property is lead-safe from a certified lead risk assessor or removing a fee on paint for corporations after a pre-determined amount of time in which no child in the state has been identified to have an EBLL. Lead poisoning prevention fees and taxes may be earmarked specifically for state general funds that are allocated to the state CLPPP or to fund essential CLPPP activities carried out by state CLPPPs.¹⁰²

Additional Resources

California Department of Tax and Fee Administration. *Childhood Lead Poisoning Prevention Fee Guide.* Description of the fee structure in California that applies to manufacturers and parties that have been or are involved in producing lead. These fees are used to fund healthcare referrals, environmental assessments, and outreach and education activities. <https://www.cdtfa.ca.gov/taxes-and-fees/childhood-lead-poison-prev-fee.htm>

State of Maine. *Frequently Asked Questions on the Lead Poisoning Prevention Fee.* FAQs on the implementation of Maine’s Lead Poisoning Prevention Fee, applied to manufacturers and organizations that sell or distribute at least 1,800 gallons of paint. The fee charge \$0.25 per gallon of paint sold. https://www.maine.gov/dhhs/mecdc/environmental-health/eohp/lead/documents/LPPF_PaintFee_FAQ.pdf

Maryland Department of the Environment. *Lead Registration.* Description of Maryland’s Lead Rental Registry, in which rental property owners must pay a registration fee and annual renewal fee for all their pre-1978 rental properties. <https://mde.maryland.gov/programs/LAND/Documents/LeadFactSheets/LeadfsStandardOfCare.pdf>

Yale Journal of Health Policy, Law, and Ethics. *Health Justice Strategies to Eradicate Lead Poisoning: An Urgent Call to Action to Safeguard Future Generations.* Journal article on practice-based evidence for funding and addressing lead poisoning, including establishing a fee structure to fund lead poisoning prevention activities, starting on page 194. <https://digitalcommons.law.yale.edu/yjhple/vol19/iss2/4>

Green & Healthy Homes Initiative. *Lead Funding Toolkit.* Toolkit with strategies for implementing fees to address lead poisoning prevention, starting on page 31. https://www.greenandhealthyhomes.org/wp-content/uploads/Lead-Funding-and-Financing-Toolkit-5-29-19_final.pdf

Penalties and Fines

State governments may have a system of accountability for individuals and businesses conducting activities that have the potential to result in lead hazards and environmental lead contamination. State code enforcement and regulatory agencies would be responsible for enforcing compliance with state lead laws and regulations, with any violations resulting in the issuance of a citation to pay a penalty or fine. Citations may be issued for several reasons, including a rental property owner not addressing identified lead-based paint hazards in a timely manner or not paying the lead registry fee for their pre-1978 rental property, contractors violating the RRP Rule during construction on a pre-1978 residential

building, and workplaces not complying with the Occupational Safety and Health Administration's (OSHA) Lead Standard. Earned revenues from penalties and fees may be earmarked specifically for state general funds allocated to the state CLPPP or to fund essential CLPPP activities carried out by state CLPPPs. State government agencies or state CLPPPs may also assist or reinforce local enforcement agencies, depending on state and local laws and regulations.^{102,103}

Additional Resources

CDC. *Building Blocks for Primary Prevention: Protecting Children from Lead-Based Paint Hazards.*

Report that provides an overview of lead poisoning primary prevention strategies for state and local governments, including leveraging penalties and fines on page 110.

https://www.cdc.gov/nceh/lead/publications/building_blocks_for_primary_prevention.pdf

Yale Journal of Health Policy, Law, and Ethics. *Health Justice Strategies to Eradicate Lead Poisoning: An Urgent Call to Action to Safeguard Future Generations.*

Journal article on practice-based evidence for funding; addresses lead poisoning, including using penalties and fees to fund lead poisoning prevention activities, starting on page 199. <https://digitalcommons.law.yale.edu/yjhple/vol19/iss2/4>

Tax Credits

State governments may offer a tax credit to owners of pre-1978 residential properties who spend their own money to complete qualifying lead poisoning prevention activities. State tax credit programs are designed to meet state needs and comply with state regulations. Programs are typically designed to provide tax credits equal to the cost of lead abatement activities up to certain limits. To receive the credit, property owners must provide proof that the property passed a clearance inspection from a certified professional.

Tax credits serve as an incentive for individual property owners to ensure their properties are lead-safe and can be especially effective for rental properties that may experience regular turnover of families with young children. Even though tax credits are targeted to individuals, state CLPPPs can leverage tax credit programs within their state to further essential CLPPP activities. State CLPPPs may refer rental property owners of pre-1978 buildings to this program to receive a tax credit for completing lead abatement activities on their properties. This referral may be contingent on a child under six living on the property and may be helpful for rental property owners who do not qualify for other lead abatement programs. State CLPPPs may also promote the tax credit through their outreach and education efforts to increase the number of property owners that engage in this method of primary prevention in high-risk areas.¹⁰²

Additional Resources

State of Massachusetts. *Lead Paint Removal Credit.* Information about Massachusetts' lead paint removal tax credit program that is available for property owners who remove or cover lead paint on their properties. <https://www.mass.gov/service-details/view-residential-property-tax-credits#LeadPaint>

Rhode Island Division of Taxation. *Tax Credits/Deductions: Residential Lead Hazard Removal.*

Information about Rhode Island's personal income tax credit for removing residential lead paint.

<http://www.tax.ri.gov/regulations/other/cr95-08.php>

Ohio Department of Health. *Lead Abatement Tax Credit.* Information about Ohio's state income tax credit for lead abatement costs. <https://odh.ohio.gov/wps/portal/gov/odh/know-our-programs/lead-abatement-tax-credit-program/lead-abatement-tax-credit-program>

CDC. *Building Blocks for Primary Prevention: Protecting Children from Lead-Based Paint Hazards.* Report that provides an overview of lead poisoning primary prevention strategies for state and local governments, including the implementation of tax credits for lead abatement on page 113. https://www.cdc.gov/nceh/lead/publications/building_blocks_for_primary_prevention.pdf

Yale Journal of Health Policy, Law, and Ethics. *Health Justice Strategies to Eradicate Lead Poisoning: An Urgent Call to Action to Safeguard Future Generations.* Journal article on practice-based evidence for funding and addressing lead poisoning, including using tax credits to fund lead poisoning prevention activities, starting on page 197. <https://digitalcommons.law.yale.edu/yjhple/vol19/iss2/4>

Lawsuits and Settlements

State CLPPPs may receive or leverage funding from a public lawsuit or settlement because of entities, such as individuals or businesses, violating state laws and regulations related to lead poisoning prevention. Most commonly, state attorney general settlements and lawsuits are against lead-based paint manufacturers. Funds from lawsuits and settlements may be earmarked by state governments for state general funds that are to be allocated to the state CLPPP; however, funds are often earmarked to fund essential CLPPP activities that are directly related to the issue from the lawsuit or settlement. For example, funding from a lawsuit against lead-based paint manufacturers may be earmarked specifically for establishing a lead-based paint abatement program that is administered by the state CLPPP.¹⁰²

Additional Resources

Green & Healthy Homes Initiative. *Lead Funding Toolkit.* Toolkit with strategies implemented by states for using state Attorney General settlements and lawsuits to address lead poisoning prevention, starting on page 31. https://www.greenandhealthyhomes.org/wp-content/uploads/Lead-Funding-and-Financing-Toolkit-5-29-19_final.pdf

Yale Journal of Health Policy, Law, and Ethics. *Health Justice Strategies to Eradicate Lead Poisoning: An Urgent Call to Action to Safeguard Future Generations.* Journal article on practice-based evidence for funding and addressing lead poisoning, including leveraging lawsuits and settlements related to lead poisoning prevention on pages 199 and 204. <https://digitalcommons.law.yale.edu/yjhple/vol19/iss2/4>

Nongovernmental Sources of Funding and Revenue

Nonprofit Hospitals

Under the Affordable Care Act, nonprofit hospitals that qualify for tax-exempt status under section 501(c)(3) of the *Internal Revenue Code* are required to conduct a community health needs assessment (CHNA) every three years that identifies and prioritizes the health needs of the community they serve.¹⁰⁴ As part of this CHNA, nonprofit hospitals must include an implementation strategy for addressing the identified priority health needs; incorporate input from those served by the hospital and community stakeholders, including those with public health expertise; and make the report publicly available.¹⁰⁵

Nonprofit hospitals are not required to address any health needs identified in the CHNA. However, state CLPPPs may leverage the CHNA process and report to further essential CLPPP activities, especially in hospitals that serve high-risk areas. Each nonprofit hospital must consider input from at least one state, local, tribal, or regional government public health department about the health needs of the community.¹⁰⁴ State CLPPPs may work with their state and local health departments to ensure that lead poisoning is being evaluated in the CHNA. If designated as a priority issue, lead poisoning is more likely to be included in the required implementation plan, which describes how the hospital plans to address the need. Examples of lead poisoning prevention activities included in a CHNA implementation plan include efforts to conduct blood lead testing on all children ages 1 and 2 years and link children with EBLs to community services. State CLPPPs may assist with the CHNA development process by providing data to nonprofit hospitals to incorporate into the CHNA.

State CLPPPs may also be involved in the CHNA evaluation process. Since nonprofit hospitals must incorporate input from community members, state CLPPPs may collaborate with nonprofit hospitals to ensure that lead poisoning data are included in their community evaluation surveys. This may also serve as an avenue for state CLPPPs or nonprofit hospitals to conduct outreach and education about lead poisoning prevention. Inclusion of lead poisoning in a CHNA can be a powerful tool for state CLPPPs to assess the burden of lead poisoning within their state and to develop strategies for addressing the issue.

Additional Resources

Connecticut Children’s Medical Center. 2019 Community Health Needs Assessment. CHNA from Connecticut Children’s Medical Center in Harford, CT that includes lead poisoning as a priority issue and incorporates strategies to address lead poisoning in the implementation plan.

<https://www.connecticutchildrens.org/wp-content/uploads/2019/10/CHNA-2019-19-106.pdf>

Mt. Washington Pediatric Hospitals. Community Health Needs Assessment and Action Plan. CHNA from Mt. Washington Pediatric Hospital in Baltimore City, MD that includes lead poisoning as a priority issue and incorporates strategies to address lead poisoning in their implementation plan.

<https://www.mwph.org/-/media/files/mwph/community/chna-executive-summary-1415.pdf?upd=20190110150819&la=en&hash=0F8C2AA1A098189A763D38CC5147D8872005DC3B>

Public Health Institute. Making Food Systems Part of Your Community Health Needs Assessment: Practical Guidance from the Tackling Hunger Project. Guidance document with strategies for incorporating food security and local food system capacity into a nonprofit hospital CHNA. While this focuses on another area of public health, strategies in this guidance document may be leveraged by state CLPPPs for incorporating lead poisoning prevention in a CHNA.

<https://2mjt5a2emh374130j5vkxw9g-wpengine.netdna-ssl.com/wp-content/uploads/2016/01/l5gi3yetjrz6genaw13ppu92u9flcbspm1wgzqc6u9llvsb888.pdf>

Internal Revenue Service. Community Health Needs Assessment for Charitable Hospital Organizations - Section 501(r)(3). Overview of the CHNA requirement for nonprofit hospitals from the IRS.

<https://www.irs.gov/charities-non-profits/community-health-needs-assessment-for-charitable-hospital-organizations-section-501r3>

Yale Journal of Health Policy, Law, and Ethics. *Health Justice Strategies to Eradicate Lead Poisoning: An Urgent Call to Action to Safeguard Future Generations.* Journal article on practice-based evidence for funding and addressing lead poisoning, including prioritizing lead poisoning prevention in nonprofit hospital CHNAs on page 188. <https://digitalcommons.law.yale.edu/yjhple/vol19/iss2/4>

Hospital Community Benefits

To qualify for the tax exemption status that is afforded to organizations under Section 501(c)(3) of the *Internal Revenue Code*, nonprofit hospitals must demonstrate their benefit to the community. Under Rev. Rule 69-545, hospitals may demonstrate community benefits in several ways, including using any surplus funds to improve hospital facilities, improve care to patients, or to advance medical training, education, and research. Nonprofit hospitals have historically used their surplus funds to provide patient care at little to no cost for those without healthcare coverage.¹⁰⁶ However, as the Affordable Care Act increased the number of Americans with health insurance, nonprofit hospitals have started using their surplus funding on community-based initiatives. Spending from nonprofit hospitals on community benefits often aligns with the priority health issues identified in their CHNA.¹⁰⁷

There is flexibility in how nonprofit hospitals meet the requirements for community benefits. State CLPPPs may collaborate with nonprofit hospitals in their state to ensure that surplus funding is spent on essential CLPPP activities. State CLPPPs may be directly involved in the delivery of these activities or may support the nonprofit hospitals that deliver these activities. These hospital community benefits have previously been dedicated to fund the following activities:

- Conducting environmental investigations to identify lead and health hazards in residential properties
- Mapping and publicizing data, such as blood lead levels, to support the organization of community-specific interventions
- Supporting the construction of new and affordable housing to increase lead-safe housing stock in high-risk communities
- Coordinating the abatement of lead-based paint hazards in homes of children with EBLLs^{107,108}

Additional Resources

National Center for Healthy Housing. *Hospital Community Benefits.* Overview of hospital community benefits with links to publications on using hospital community benefits to advance healthy housing strategies, including lead. <https://nchh.org/tools-and-data/financing-and-funding/healthcare-financing/hospital-community-benefits/>

National Center for Healthy Housing. *Hospital Community Benefits: Opportunities for Healthy Homes.* Report with strategies for using hospital community benefits to develop healthy homes programs, including programs and services related to lead poisoning prevention. https://nchh.org/resource-library/HCF_APHA_techbrief2_community%20benefits_FINAL.pdf

Catholic Health Association of the United States and Enterprise Community Partners. *Housing and Community Benefit: What Counts?* Document about healthy housing programs that would be eligible to be funded by hospital community benefits, including lead abatement programs. <https://www.chausa.org/docs/default-source/health-progress/community-benefit-housing-and-community-benefit-what-counts.pdf?sfvrsn=0>

Health Affairs and Robert Wood Johnson Foundation. *Nonprofit Hospitals' Community Benefit Requirements.* Report on the history of hospital community benefits and how they may be implemented under the Affordable Care Act.

https://www.healthaffairs.org/doi/10.1377/hpb20160225.954803/full/healthpolicybrief_153.pdf

Yale Journal of Health Policy, Law, and Ethics. *Health Justice Strategies to Eradicate Lead Poisoning: An Urgent Call to Action to Safeguard Future Generations.* Journal article on practice-based evidence for funding and addressing lead poisoning, including using hospital community benefits to fund lead poisoning prevention programs, starting on page 190.

<https://digitalcommons.law.yale.edu/yjhple/vol19/iss2/4>

Green & Healthy Homes Initiative. *Lead Funding Toolkit.* Toolkit with strategies that can be implemented by states for using hospital community benefits to address lead poisoning prevention, starting on page 38. https://www.greenandhealthyhomes.org/wp-content/uploads/Lead-Funding-and-Financing-Toolkit-5-29-19_final.pdf

Banks and Financial Institutions

Banks or financial institutions that serve defined geographic areas within a state may provide low- or no-interest loans or other financial assistance programs to homeowners or rental property owners for the remediation or abatement of residential lead hazards, including lead in paint, drinking water, or soil. These loans may be granted proactively to support primary prevention efforts or to address lead hazards that contributed to a child's EBLL.

Assistance from banks and financial institutions would be most beneficial for homeowners or rental property owners who may not meet the eligibility requirements for a lead abatement program, such as HUD's LHR Grant Program, but require financial assistance to abate lead hazards. Property owners that qualify for lead abatement programs but who are unable to afford match payments that may be required would also benefit from this source of funding.

State CLPPPs may work with community partners or directly with banks and financial institutions to establish low- or no-interest loans or other financial assistance programs for homeowners and rental property owners in their communities, especially in high-risk areas. State CLPPPs may incorporate information about these programs into their outreach and education efforts or establish a referral system for property owners that would benefit from the financial assistance.¹⁰²

Additional Resources

Delta Institute and EPA. *Creative Funding Strategies for Remediation of Lead and Other Healthy Housing Hazards: A Guide for Increasing Private-Sector Financing.* Strategies for financing lead hazard abatement through financial institutions and bank loan programs, starting on page 13.

<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.592.9840&rep=rep1&type=pdf>

Yale Journal of Health Policy, Law, and Ethics. *Health Justice Strategies to Eradicate Lead Poisoning: An Urgent Call to Action to Safeguard Future Generations.* Journal article on practice-based evidence for funding and addressing lead poisoning, including leveraging regional financial institutions, starting on page 192. <https://digitalcommons.law.yale.edu/yjhple/vol19/iss2/4>

Pay for Success Programs

A pay for success (PFS) program may also be known as social impact bonds. In a PFS program, a governmental entity, such as a state government, identifies an outcome it would like to achieve and determine the monetary value of that outcome. That entity contracts with an organization, typically a non-governmental organization, to achieve the outcome, at which point the governmental entity pays the non-governmental organization the agreed upon monetary value of the outcome. PFS programs typically require a higher up-front payment or cost, but they usually have a large long-term return on investment, especially if the outcome achieved focuses on primary prevention.^{102,109}

Since PFS programs are designed to achieve outcomes specific to a state or community, there is flexibility in how PFS programs can fund essential CLPPP activities. State CLPPPs or governments may identify specific lead poisoning prevention outcomes that could be achieved through a PFS program in a high-risk area, such as a reduction in the number of residential units with lead hazards over a specific period. PFS programs can also be implemented by local CLPPPs or governments with the assistance of state CLPPPs. Whether implemented at the state or local level, state CLPPPs may provide technical assistance with designing the PFS program, establishing a financial model, collaborating with stakeholders involved in the interventions or members of the public that benefit from the program, and performing the epidemiological analysis needed to identify target areas.

Additional Resources

CDC. *Pay for Success: A how-to guide for local government focused on lead-safe homes.* Strategies for implementing a PFS program focused on lead poisoning prevention. While written for local CLPPPs, the strategies may also be adapted to fit the needs of state CLPPPs.

https://www.cdc.gov/nceh/lead/docs/pay_for_success_guide.pdf

Green & Healthy Homes Initiative. *Lead Funding Toolkit.* Toolkit with strategies that can be implemented by states for implementing a PFS program to address lead poisoning prevention, starting on page 39. https://www.greenandhealthyhomes.org/wp-content/uploads/Lead-Funding-and-Financing-Toolkit-5-29-19_final.pdf

Yale Journal of Health Policy, Law, and Ethics. *Health Justice Strategies to Eradicate Lead Poisoning: An Urgent Call to Action to Safeguard Future Generations.* Journal article on practice-based evidence to fund and address lead poisoning, including implementing PFS programs, starting on page 193.

<https://digitalcommons.law.yale.edu/yjhple/vol19/iss2/4>

Table 1: Sources of Funding and Revenue for Essential CLPPP Activities

	Outreach and Education	Surveillance	EBLL Follow-up: Case Management	EBLL Follow-up: Environmental Investigations	EBLL Follow-up: Linkages to Services	Abatement: Lead-Based Paint Hazard Control	Abatement: Community-based Environmental Contamination	Abatement: Lead-Safe Childcare Facilities and Schools
Federal Sources of Funding and Revenue								
CDC: Childhood Lead Poisoning Prevention Cooperative Agreement	✓	✓	✓	✓	✓			
CDC: Enhancing Innovation and Capabilities of the Environmental Public Health Tracking Network		✓						
CDC: Public Health Associate Program (PHAP)	✓		✓	✓	✓			
ATSDR: ATSDR's Partnership to Promote Local Efforts to Reduce Environmental Exposure (APPLETREE)	✓						✓	✓
HUD: Lead-Based Paint Hazard Reduction Grant Program	✓	✓		✓	✓	✓		
HUD: Lead and Healthy Homes Technical Studies Program, Lead Technical Studies	✓	✓				✓	✓	
HUD: Community Development Block Grant (CDBG) Program, State CBDG Program				✓	✓			✓
HUD: Lead-Based Paint Capital Fund Program (LBPCF)	✓			✓	✓	✓		
HUD: Housing Choice Voucher Program (HCV)					✓	✓		
HUD: Home Investment Partnership Program (HOME)						✓		
HUD: Authority to Accept Unsolicited Proposals for Research Partnerships		✓				✓	✓	
EPA: Superfund Program	✓	✓		✓		✓	✓	
EPA: Brownfields Program	✓					✓	✓	
EPA: The Water Infrastructure Improvements for the Nation Act Grant (WIIN Act)	✓						✓	✓
EPA: Drinking Water State Revolving Fund (DWSRF)							✓	✓
EPA: Water Infrastructure Finance and Innovation Act Program (WIFIA)							✓	✓

	Outreach and Education	Surveillance	EBLL Follow-up: Case Management	EBLL Follow-up: Environmental Investigations	EBLL Follow-up: Linkages to Services	Abatement: Lead-Based Paint Hazard Control	Abatement: Community-based Environmental Contamination	Abatement: Lead-Safe Childcare Facilities and Schools
EPA: State Environmental Justice Cooperative Agreement Program (SEJCA)	✓	✓						
EPA: The Environmental Justice Collaborative Problem-Solving Cooperative Agreement Program (EJCPS)	✓	✓				✓	✓	
EPA: Environmental Justice Small Grants Program	✓	✓				✓	✓	
HHS: Head Start	✓	✓			✓			✓
HHS: Title V MCH Funds	✓	✓			✓			
HHS: Healthy Start	✓	✓			✓			
USDA: Supplemental Nutrition Assistance Program (SNAP) and SNAP Education	✓				✓			
USDA: Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)	✓				✓			
State Sources of Funding and Revenue								
State General Funds	✓	✓	✓	✓	✓	✓		
State Lead Service Line Replacement Programs	✓						✓	✓
Medicaid	✓	✓	✓	✓	✓	✓	✓	
Fees and Taxes	✓	✓	✓	✓	✓	✓		
Penalties and Fines	✓	✓	✓	✓	✓	✓		
Tax Credits	✓					✓		
Lawsuits and Settlements	✓		✓		✓	✓		
Pay for Success Programs	✓			✓	✓	✓	✓	✓
Nongovernmental Sources of Funding and Revenue								
Nonprofit Hospitals	✓	✓			✓			
Hospital Community Benefits	✓	✓		✓	✓	✓	✓	
Banks and Financial Institutions						✓	✓	
Pay for Success Programs	✓			✓	✓	✓	✓	✓

Blending and Braiding Models for Childhood Lead Poisoning Prevention Programs

Sustainability is crucial for public health programs and vital for the health of all communities. For the purposes of this toolkit, sustainability is defined as the capacity to continue funding and delivering program services, namely essential CLPPP activities, following the reduction or elimination of one or more existing sources of funding.^{110,111}

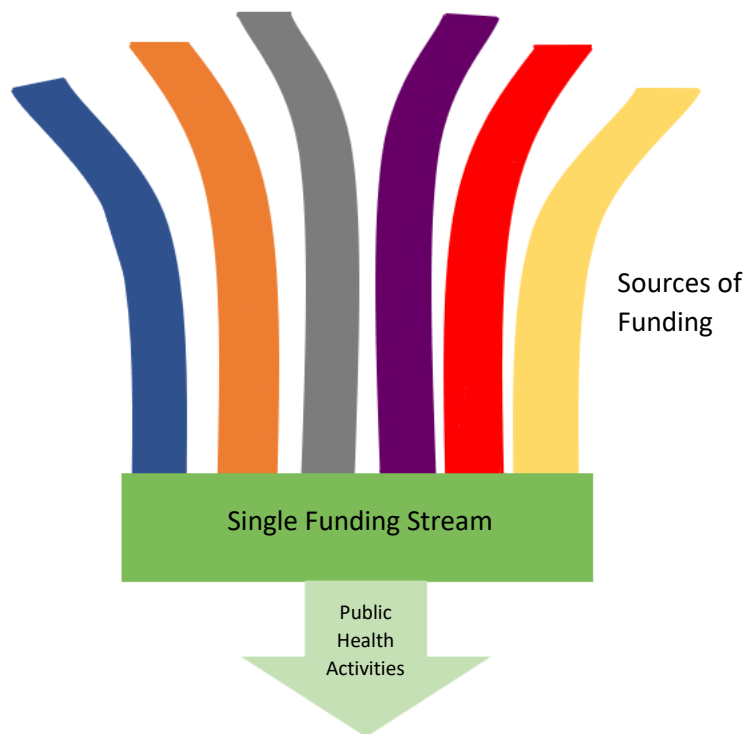
Sustainable funding and continued delivery of essential CLPPP activities is in the best interest of state CLPPPs for several reasons. First, lead poisoning has impacted children and adults across the United States for decades, if not longer. Despite a decline in national BLL trends since the 1970s, lead poisoning continues to be a persistent threat today and will be until lead exposure is eliminated. State CLPPPs must have the ability to continue managing EBLLs, prevent lead poisoning in children, and conduct essential CLPPP activities for the foreseeable future, especially in high-risk areas and populations.¹¹² Second, as with many public health programs, there is often a delay, or latency period, between delivery of essential CLPPP activities and their impact on a population. It's important to ensure that activities and funding are sustained throughout this latency period, in which evaluation outcomes may yield limited results, in order to avoid a disruption in much-needed services from state CLPPPs.¹¹³ Third, when essential CLPPP activities are abruptly reduced or terminated, the beneficiaries of those services, including community members and families, are more likely to lose trust in those agencies, even after funding may be restored. Decreased trust between a state CLPPP and community members may have negative impacts on outreach and education efforts, blood lead testing rates, EBLL case management, and more.¹¹³

A key component of the sustainability process is developing a plan that optimizes the use of funds over time.¹¹⁴ Since most sources of governmental and nongovernmental funding for essential CLPPP activities have limits set by funders in how they can be spent, state CLPPPs must be creative through the blending and braiding of funds. Strategies for blending and braiding funds have been researched and implemented at the local, state, and federal levels since at least 2003, and have notably been successful in sustaining, and even increasing, funding for education and early childcare organizations.¹¹⁵⁻¹¹⁷ Implementation of blending and braiding strategies for sustainability planning benefit public health programs that rely heavily on external funding sources because it provides stability if one funding source is reduced or eliminated. Building a strong financial foundation through blending and braiding strategies ensures state CLPPPs can continuously deliver essential CLPPP activities in their communities. This toolkit presents a modified framework for blending and braiding funds that is specific to the needs of state CLPPPs and their essential activities.

Blending

Blending funds traditionally refers to combining different sources of funding into a single indistinguishable stream with a single set of reporting requirements.¹¹⁵ Under this traditional blending model, separate sources of funding lose their individual identities so they can be used collectively to meet service needs that may not be covered by a single source. This approach provides flexibility in how funds can be spent and allows organizations to make decisions on how to most effectively allocate funding. Blending funds under a traditional blending model is an effective strategy; however, it is also an arduous and time-consuming task that requires the coordination and pooling of resources across several state government agencies. It may also require statutory authority in order to be accomplished.¹¹⁸ An illustration of the traditional blending model is below (Figure 3).

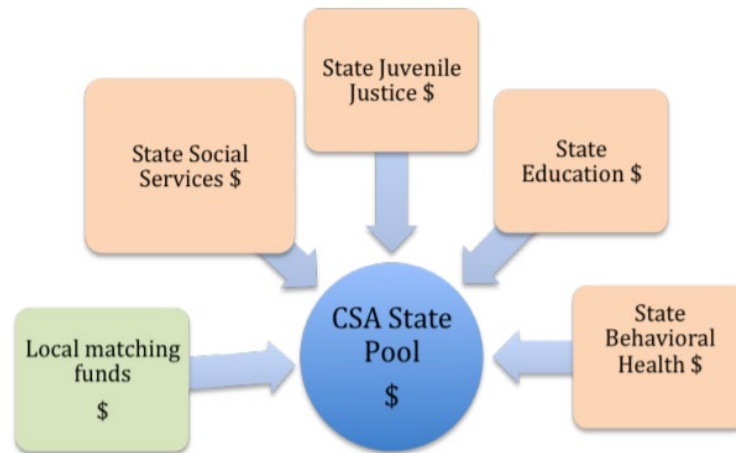
Figure 3: Traditional Blending Model



Adapted from: Trust for America's Health. (2018). Braiding and Blending Funds to Support Community Health Improvement: A Compendium of Resources and Examples. Retrieved from <https://www.tfah.org/wp-content/uploads/2018/01/TFAH-Braiding-Blending-Compendium-FINAL.pdf>

An example of a traditional blending model is the Virginia Children’s Services Act (CSA), which combined at least seven separate sources of funding across four different departments into a single funding stream to pay for any recommended services benefitting families in need.¹¹⁹ A simplified diagram of Virginia’s blended CSA funding model is below (Figure 4).

Figure 4: Virginia Children's Services Act (CSA) Blended Funding

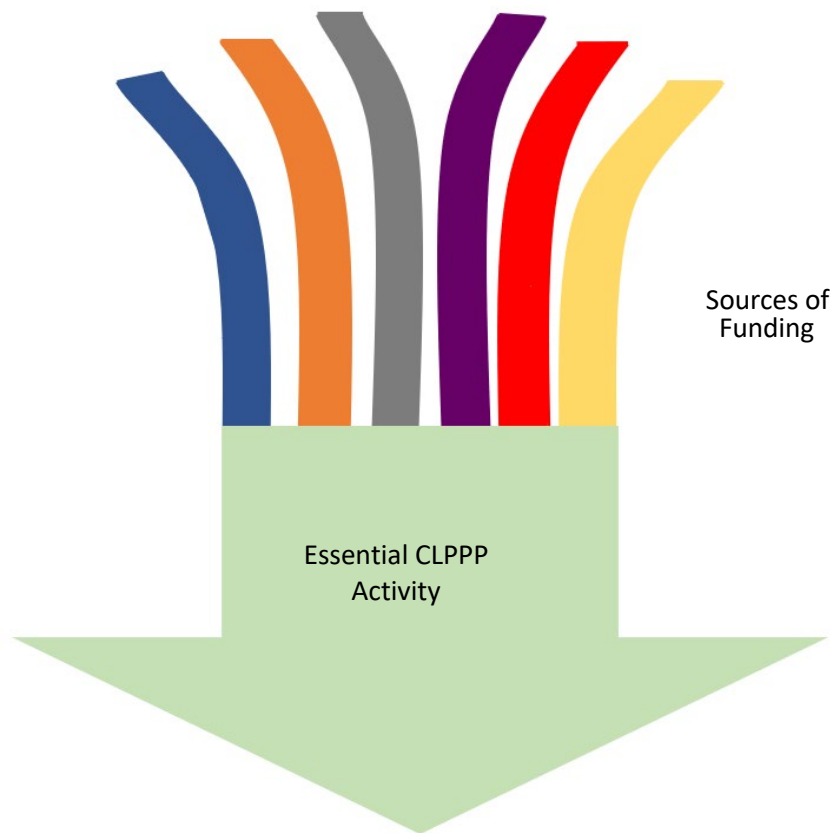


Source: National Academy for State Health Policy. (2016). Pooling and Braiding Funds for Health-Related Social Needs: Lessons from Virginia's Children's Services Act. Retrieved from <https://www.nashp.org/wp-content/uploads/2016/06/CSA-Virginia-Brief-1.pdf>

A traditional blending model may be pursued by state CLPPPs as a long-term strategy for sustainability. However, it may not be feasible for state CLPPPs that rely heavily on external funding sources and are focused on establishing a more immediate sustainable financial foundation for their program. Alternatively, state CLPPPs may also follow a modified blending model, developed specifically to address essential CLPPP activities.

Figure 5 (page 55) illustrates the modified blending model for state CLPPPs. In this model, the emphasis is on the application of several sources of funding to cover a single essential CLPPP activity rather than the maintenance or loss of program identity. Under the modified blending model, two or more funding sources are combined or integrated to fund a single activity, completely bypassing the creation of a new, single funding stream. Therefore, all sources of funding maintain their own identities and continue to have independent reporting requirements.

Figure 5: Modified Blending Model for State Childhood Lead Poisoning Prevention Programs



The modified blending model differs from the traditional blending model in several ways:

1. It is more flexible and can be adapted to fit the specific needs of state CLPPPs at any time.
2. It requires fewer resources from state CLPPPs to establish and maintain. It also requires less buy-in from external partners and state agencies, and most likely it does not require statutory authority.
3. This model can be used to directly cover or leverage funding for a specific essential CLPPP activity or any other activity conducted by a state CLPPP.
4. It can incorporate external funding sources.
5. Modified blending can be adapted into a traditional blending model.

A modified blending model can be accomplished in many ways and may look different for each state CLPPP. Here are some common examples of allocating funding under a modified blending model:

- Using state general funds or HUD's CDBG funding to pay the minimum match requirement for HUD's LHR Grant Program
- Supplementing funding from EPA's Brownfields Program with other federal sources of funding, such as HUD's LHR Grant Program
- Supporting the state's MCH Block Grant Program with funding from CDC's CLPPP Cooperative Agreement, Medicaid, or Healthy Start
- Borrowing funding from EPA's WIFIA Program to complete a DWSRF-funded project

- Leveraging in-kind support from CDC’s Enhancing Innovation and Capabilities of the Environmental Public Health Tracking Network cooperative agreement to conduct surveillance-related activities under CDC’s CLPPP Cooperative Agreement
- Dedicating state general funds, CDC’s PHAP, or other sources of flexible funding to personnel salaries and benefits to maximize funding available to conduct an essential CLPPP activity under sources of funding with stricter allowable costs
- Using two or more sources of funding to pay for different components of a single service or activity, such as using CDBG funding to fund abatement activities for families who are not eligible for enrollment in HUD’s LHR Grant Program
- Partnering with other state departments and agencies (e.g. refugee health programs, public works, water department, etc.) to leverage access to existing community and outreach infrastructure

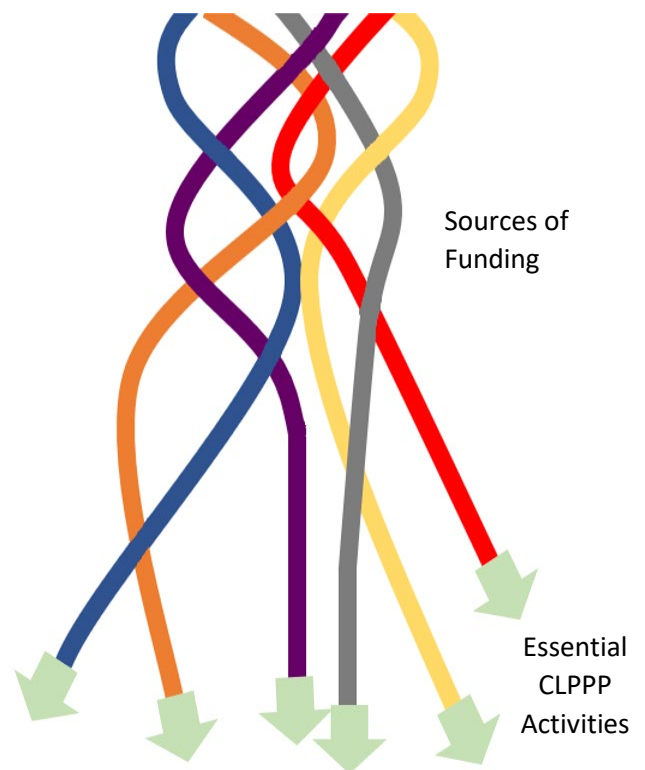
Braiding

Braiding refers to coordinating two or more sources of funding to support the total cost of implementing a program or activity.¹¹⁵ For state CLPPPs, a braiding model would include identifying separate sources of funding that can cover all essential CLPPP activities. Individually, these sources of funding may be earmarked for specific services and activities, but together, they can fund the delivery of all services provided by a state CLPPP. An illustration of a braiding model is to the right (Figure 6).

It is recommended that state CLPPPs refer to Table 1 on [page 50](#) to identify potential sources of funding and revenue for each essential CLPPP activity. A blank table is included on [page 58](#), which can be used by state CLPPPs to assist with planning for how to best leverage their sources of funding and revenue to cover essential CLPPP activities.

Like the modified blending model, each source of funding under a braiding model maintains its own identity and has reporting requirements that are independent from other sources of funding. However, unlike the modified blending model, the focus of a braiding model should be to determine how sources of funding can support the entire state CLPPP program, as opposed to a single essential CLPPP activity.

Figure 6: Braiding Model for State Childhood Lead Poisoning Prevention Programs



Adapted from: Trust for America's Health. (2018). Braiding and Blending Funds to Support Community Health Improvement: A Compendium of Resources and Examples. Retrieved from <https://www.tfah.org/wp-content/uploads/2018/01/TFAH-Braiding-Blending-Compendium-FINAL.pdf>

There are several benefits for state CLPPPs that adopt a braiding model to assist with sustainability planning, including the following:

1. Using the model review as an exercise in project management, as it identifies essential CLPPP activities that are funded, need to be funded, or require additional funding to maximize effectiveness¹²⁰
2. Most likely not requiring a statutory authority¹²⁰
3. Incorporating external sources of funding into the model
4. Determining best practices for leveraging sources of funding from other public health programs or state agencies¹²¹
5. Identifying best practices for diversifying funding for essential CLPPP activities across different levels of government and nongovernmental sectors

Tool: Blank Sources of Funding and Revenue for Essential CLPPP Activities Table

	Outreach and Education	Surveillance	EBLL Follow-up: Case Management	EBLL Follow-up: Environmental Investigations	EBLL Follow-up: Linkages to Services	Abatement: Lead-Based Paint Hazard Control	Abatement: Community-based Environmental Contamination	Abatement: Lead-Safe Childcare Facilities and Schools
Federal Sources of Funding and Revenue								
CDC: Childhood Lead Poisoning Prevention Cooperative Agreement								
CDC: Enhancing Innovation and Capabilities of the Environmental Public Health Tracking Network								
CDC: Public Health Associate Program (PHAP)								
ATSDR: ATSDR's Partnership to Promote Local Efforts to Reduce Environmental Exposure (APPLETREE)								
HUD: Lead-Based Paint Hazard Reduction Grant Program								
HUD: Lead and Healthy Homes Technical Studies Program, Lead Technical Studies								
HUD: Community Development Block Grant (CDBG) Program, State CBDG Program								
HUD: Lead-Based Paint Capital Fund Program (LBPCF)								
HUD: Housing Choice Voucher Program (HCV)								
HUD: Home Investment Partnership Program (HOME)								
HUD: Authority to Accept Unsolicited Proposals for Research Partnerships								
EPA: Superfund Program								
EPA: Brownfields Program								
EPA: The Water Infrastructure Improvements for the Nation Act Grant (WIIN Act)								
EPA: Drinking Water State Revolving Fund (DWSRF)								
EPA: Water Infrastructure Finance and Innovation Act Program (WIFIA)								

	Outreach and Education	Surveillance	EBLL Follow-up: Case Management	EBLL Follow-up: Environmental Investigations	EBLL Follow-up: Linkages to Services	Abatement: Lead-Based Paint Hazard Control	Abatement: Community-based Environmental Contamination	Abatement: Lead-Safe Childcare Facilities and Schools
EPA: State Environmental Justice Cooperative Agreement Program (SEJCA)								
EPA: The Environmental Justice Collaborative Problem-Solving Cooperative Agreement Program (EJCPS)								
EPA: Environmental Justice Small Grants Program								
HHS: Head Start								
HHS: Title V MCH Funds								
HHS: Healthy Start								
USDA: Supplemental Nutrition Assistance Program (SNAP) and SNAP Education								
USDA: Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)								
State Sources of Funding and Revenue								
State General Funds								
State Lead Service Line Replacement Programs								
Medicaid								
Fees and Taxes								
Penalties and Fines								
Tax Credits								
Lawsuits and Settlements								
Pay for Success Programs								
Nongovernmental Sources of Funding and Revenue								
Nonprofit Hospitals								
Hospital Community Benefits								
Banks and Financial Institutions								
Pay for Success Programs								
Other Sources of Funding and Revenue								

Limitations and Challenges

This section provides an overview of the limitations of this toolkit and challenges that state CLPPPs should consider as they implement the strategic approaches presented in this toolkit.

Intended audience. This toolkit was developed for state CLPPPs as the intended audience. State CLPPPs serve a specific role in the lead poisoning prevention delivery model and the elements of this toolkit were designed with this role in mind. Therefore, this toolkit may not be applicable to other stakeholders or government entities that focus efforts on lead poisoning prevention. It is recognized that local CLPPPs may also be responsible for conducting essential CLPPP activities or may be eligible for some of the same sources of funding available to state CLPPPs. Local CLPPPs may consider adapting the information in this toolkit to meet their needs.

Variation in implementation. Each state CLPPP operates under different statutes and regulations within their state, which influences their involvement in lead poisoning prevention. The essential CLPPP activities outlined in this toolkit provide an overview of common activities conducted by most state CLPPPs. However, this definition may not include other activities conducted by state CLPPPs or may include activities that some state CLPPPs do not conduct.

Funding availability and eligibility. The sources of funding section included in this toolkit is not exhaustive of all available sources of funding. Additionally, the sources of funding included in this toolkit are available to state CLPPPs at the time of publishing, but the availability of funding or eligibility criteria is subject to change over time. It is recommended that state CLPPPs review the funding notice directly from the funding organization prior to completing an application to determine eligibility.

History of funding and available resources. While this toolkit focuses on sustainability and the identification of opportunities for future funding, it is recognized that well-resourced and well-financed state health departments and state CLPPPs have an advantage in the application process for securing funding and may be more successful in achieving sustainability.

Ongoing evaluation. All the funding sources identified in this toolkit are time bound, meaning that funding is only available for a predetermined amount of time, typically between one and five years. It is difficult to achieve sustainability without a consistent source of funding. **Therefore, the process of identifying and securing funding for essential CLPPP activities should be an ongoing activity for state CLPPPs.**

Conclusion

Sustainability is an important element to successful state CLPPPs. However, there is no single source of funding that covers all the essential activities conducted by state CLPPPs. The sources of funding and revenue identified in this toolkit cover at least one essential CLPPP activity, but state CLPPPs may need to identify more than one funding source to best protect the children in their state. State CLPPPs are better able to leverage funding from multiple sources by using funding models or strategies that promote sustainability, such as a modified blending model or a braiding model that is specific to state CLPPPs. Lead poisoning prevention is an essential service, and it is important to properly fund state CLPPPs to be able to sustain their activities over time and to ensure the health and well-being of children.

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